



# Diodes Incorporated Discrete and Analog Semiconductors

Qualification Report - PCN-2223

Manufacturer No.: Qualification of Additional Wafer Fabrication Source, and

Conversion to Green Mold Compound

Revision: 0

**Date:** April 12, 2016

Qualified By: Diodes Incorporated

**Also Applicable To:** The part numbers listed in the associated PCN are Qualified by

Similarity (QBS) to the devices included in this report.

Please go to www.diodes.com for current data sheets on

associated devices

Prepared By: Diodes US Document Control Date April 12, 2016

Approved By: Diodes US QRA Department Date April 12, 2016





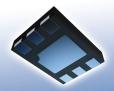


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Existing industry standards for plastic encapsulated microcircuit qualification and reliability monitors are based upon historical data, experiments, and field experience with the use of these devices in commercial and industrial applications. The applicability of these standards in determining the suitability for use and safety performance in life support, military and aerospace applications has not been established. Due to the multiple variations in field operating conditions, a component manufacturer can only base estimates of product life on models and the results of package and die level qualification. The buyer's use of this data, and all consequences of such use, is solely the buyer's responsibility. Buyer assumes full responsibility to perform sufficient engineering and additional qualification testing in order to properly evaluate the buyer's application and determine whether a candidate device is suitable for use in that application. The information provided by Diodes Incorporated shall not be considered sufficient grounds on which to base any such determination.

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DIODES INCORPORATED

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DATE: 12th April, 2016

PCN #: 2223

PCN Title: Qualification of Additional Wafer Fabrication Source, and Conversion to

Green Mold Compound

Dear Customer:

This is an announcement of change(s) to products that are currently being offered by Diodes Incorporated.

We request that you acknowledge receipt of this notification within 30 days of the date of this PCN. If you require samples for evaluation purposes, please make a request within 30 days as well. Otherwise, samples may not be built prior to this change. Please refer to the implementation date of this change as it is stated in the attached PCN form. Please contact your local Diodes sales representative to acknowledge receipt of this PCN and for any sample requests.

The changes announced in this PCN will not be implemented earlier than 90 days from the notification date stated in the attached PCN form.

Previously agreed upon customer specific change process requirements or device specific requirements will be addressed separately.

For questions or clarification regarding this PCN, please contact your local Diodes sales representative.

Sincerely,

Diodes Incorporated PCN Team



### PRODUCT CHANGE NOTICE

### PCN-2223 REV 00

Notification Date:	Implementation Date:	Product Family:	Change Type:	PCN #:
12 <sup>th</sup> April, 2016	11 <sup>th</sup> July, 2016	Discrete Semiconductors	Additional Wafer Fabrication Source / Assembly Material	2223

TITLE

Qualification of Additional Wafer Fabrication Source, and Conversion to Green Mold Compound

## **DESCRIPTION OF CHANGE**

This PCN is being issued to notify customers that in order to assure continuity of supply, Diodes Incorporated has qualified Diodes internal BCD (Shanghai) Micro-electronics Limited (SFAB) as an additional wafer fabrication facility for the devices listed below. In addition, the mold compound for the products listed below is being converted from non-Green to Green. The green encapsulate will contain no halogens or Sb<sub>2</sub>O<sub>3</sub> fire retardants. The products will remain 94-V0 compliant with a 260°C maximum reflow temperature for 30 sec (total) and MSL 1.

Full electrical characterization and reliability testing have been completed using representative devices built with wafer materials from the additional wafer fabrication source and/or with green mold compound to ensure there is no change to device functionality, electrical specifications in the datasheet, or package performance.

#### **IMPACT**

Continuity of Supply

#### **PRODUCTS AFFECTED**

Please refer to Table 1 for Additional Wafer Source and Conversion to Green Mold Compound

Please refer to Table 2 for Additional Wafer Source

Please refer to Table 3 for Conversion to Green Mold Compound

WEB LINKS	
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Manufacturer's Notice:	http://www.diodes.com/quality/pcns
For More Information Contact:	http://www.diodes.com/contacts
Data Sheet:	http://www.diodes.com/products

# DISCLAIMER

Unless a Diodes Incorporated Sales representative is contacted in writing within 30 days of the posting of this notice, all changes described in this announcement are considered approved.



Table 1 - A	Additional Wafer So	ource and Convers	sion to Green Mold	Compound
SBR10100CTB-13	SBR20A40CT	SBR30A100CT	SBR40U100CT	SBR40U120CT
SBR10100CT	SBR20A100CT	SBR40150CT	SBR60A60CT	SBR40U60CTE
SBR10U100CT	SBR20A200CT	SBR30A120CT	SBR60A150CT	SBR20100CTB-13
SBR10U150CT	SBR20U60CT	SBR20A120CT	SBR40U60CT	SBR3060CTB-13
SBR20100CT	SBR20U100CT	SBR40U45CT	SBR40U150CT	SBR60A300CT
SBR20150CT	SBR30A60CT			

	Table	2 - Additional Wafer	Source	
SBR20A100CT-G	SBR10150CTFP	SBR40U120CT-G	SBR2A40P1-7	SBR3U40P1-7
SBR30A45CT-G	SBR30A60CT-G	SBR40U150CT-G	SBR1045SP5-13	SBR3U60P1-7
SBR20A45CT-G	SBR30A100CT-G	SBR40U60CT-G	SBR3U30P1-7	SBR10A45SP5-13
SBR40U100CT-G	SBR30A120CT-G	SBR60A60CT-G	SBR05M100BLP-7	SBR1U400P1-7
SBR40U45CT-G	SBR20A120CT-G	SBR8A45SP5-13	SBR8M45SP5-13	SBR12U120P5-13D
SBR20A40CT-G	SBR20100CTFP	SBR10U45SP5-13	SBR15U30SP5-13	SBR12U120P5-13
SBR20A40CTFP-G	SBR20100CTFP-G	SBR8U60P5-13	SBR12U100P5-13	SBR8U20SP5-13
SBR20U60CT-G	SBR20150CTFP	SBR15U50SP5-13	SBR10U200P5-13	SBR1A400P1-7
SBR10U100CTFP	SBR20150CTFP-G	SBR12U45LH1-13R	SBR6100CTL-13	SBR15U100CTL-13
SBR10200CTFP				

	Table 3 - C	Conversion to Green	Mold Compound	
SBR10100CTB	SBR3045CT	SBR60A100CT	SBR20100CTB	SBG3060CT-T-F
SBR1040CT	SBR3060CT	SBR40U200CT	SBR30A60CTB	SBG3045CT-T-F
SBR1060CT	SBR30100CT	SBR60A200CT	SBR20A100CTE	SBG3040CT-T-F
SBR10150CT	SBR30150CT	SBR10200CT	SBR20A60CTB	SBG3030CT-T-F
SBR10U40CT	SBR30200CT	SBR40U100CTE	SBR40U120CTE	SBR20A60CTB-13
SBR10U60CT	SBR30A40CT	SBR40S45CT	SBR30A100CTB	SBR10U200CTB-13
SBR10U200CT	SBR30A45CT	SBR30S30CT	SBR3045SCTB	SBR10200CTB
SBR2040CT	SBR30A50CT	SBR20A200CTB-13	SBR20U100CTE	SBR30A45CTB
SBR2045CT	SBR30A150CT	SBR30A45CTB-13	SBR20100CTE	SBR10U300CT
SBR2060CT	SBR30M100CT	SBR30A60CTB-13	SBR30A100CTE	SBR20A300CT
SBR20A45CT	SBR4040CT	SBR30A100CTB-13	SBR40U200CTB	SBR30300CT
SBR20A60CT	SBR4045CT	SBR1040CTB-13	MBRB1545CT-T	SBR40U300CT
SBR20A150CT	SBR4060CT	SBR20A200CTB	MBRB1540CT-T	SBR20A300CTB
SBR20U40CT	SBR40100CT	SBR10U200CTB	MBRB1535CT-T	SBR40U300CTB
SBR20U150CT	SBR30U30CT	SBR1040CTB	MBRB1530CT-T	SBR40U300CTB-13
SBR3040CT	SBR60A45CT	SBR40U200CTB-13		



Description: SAT TO220/TO263/TO262 Non-green to Green Mold Compound

	Category					Qual Device 1		Qual Device 2		Qual Device 3		Qual Device 4	
	Product	Part Number		I		SBR20A200CTB-13		SBR10100CT		SBR40U45CT		SBR20A300CT	
	Assembly	Package Type				TO263AB		TO-220AB		TO-220AB		TO-220AB	
	Assembly	Package Type  Package Size				15.24*10.11*4.57mm		28.6*10.11*4.57		28.6*10.11*4.57		28.6*10.11*4.57	
	Wafer	Die Name(s)		ł		C100EA0200DA1		Z050BA0100AGA1		C300AA0045BA1		C100EA0300DA1	
	Wafer	Die Size (W/L/Thickness) - After Saw		ł		2.61*2.61*0.25mm		1.47*1.47*0.250mm		7*3.92*0.250mm		2.61*2.61*0.29mm	
	Wafer	Die Process / Technology		•		SBR		SBR		7*3.92*0.23011111 SBR		SBR	
	Wafer	Wafer FAB/ Location		ł		CSMC/Wuxi		Ofab/Oldham		CSMC/Wuxi		CSMC/Wuxi	
	Wafer	Wafer Diameter		•		6"		6"		6"		6"	
	Wafer	Front Metal Type				AlSiCu		AlSiCu		AlSiCu		AlSiCu	
						4um				4um			
	Wafer	Front Metal Layer Number/ Thickness						4um				4um	
	Wafer	Number of Poly Layers				1		1		1		11	
	Wafer	Back Metal Type (All Layers)				TiNiAg		TiNiAg		TiNiAg		TiNiAg	
	Wafer	Back Metal Thickness (All Layers)				1.3um		1.3um		1.3um		1.3um	
	Wafer	No of masks Steps				4		3		3		3	
	Assembly	Die quantity per package (e.g. single or dual dies)				2 single dies		2 single dies		Dualdies		Dualdies	
	Assembly	Die Attach Method (DB Epoxy/Solder Type)				SOFT SOLDER		SOFT SOLDER		SOFT SOLDER		SOFT SOLDER	
	Assembly	Die Attach Material/ Supplier				SOFT SOLDER		SOFT SOLDER		SOFT SOLDER		SOFT SOLDER	
	Assembly	Bond Wire/Clip Bond Material/ Supplier				15mil Al		15mil Al		15mil Al		15mil Al	
	Assembly	Bond Type (at Die)				ultrasonic		ultrasonic		ultrasonic		ultrasonic	
	Assembly	Bond Type (at LF)				ultrasonic		ultrasonic		ultrasonic		ultrasonic	
	Assembly	No. of bond over active area				4		2		2		2	
	Assembly	Glass Transistion Temp				160 C		160 C		160 C		160 C	
	Assembly	Terminal Finish (Plating) Material		I		100% matte Tin		100% matte Tin		100% matte Tin		100% matte Tin	
	Assembly	Header plating (Die Land Area)		I		N/A		N/A		N/A		N/A	
	Assembly	Wire Diameter		1		15mil		15mil		15mil		15mil	
	Assembly	Leadframe Type				TO263-3L		TO220-3L C		T0220-3L C		TO220-3L C	
	Assembly	Leadframe Material				Cu		KFC-1/2H		KFC-1/2H		KFC-1/2H	
	Assembly	Lead Frame Manufacturer				XMYM/ NBKQ		NBKQ/XMYH		NBKQ/XMYH		NBKQ/XMYH	
	Assembly	Molding Compound Type		1		KTMC1050G		KTMC1050G		KTMC1050G		KTMC1050G	
	Assembly	Mold Compound Material Manufacturer		1		KCC		KCC		KCC		ксс	
	Assembly	Green Compound (Yes/No)		1		Yes		Yes		Yes		Yes	
	Assembly	Lead-Free (Yes/No)		1		Yes		Yes		Yes		Yes	
	Assembly	Assembly Site/ Location		1		SAT		SAT		SAT		SAT	
	Assembly	Test Site/ Location				SAT		SAT		SAT		SAT	
	Product	Max Junction Temp		1		175°C		150°C		150°C		150°C	
	Product	DataSheet		1		DS31076		DS30961		DS31097		DS30993	
	Hoduct					2331070		5530301		5331037		5530555	+
		Reliability and Characterization Testing											
# in AEC Q101 (D)	Test	Test Conditions	Duration / Limits	Accept on # Failed/ Sample Size per Lot	# of Lots	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail
		Bake 125C	24 Hrs			X	Pass						
	MSL1 Pre-	Soak 85C, 85% RH	168Hrs	SMD only,	3 Assembly	X	Pass						
2	conditioning	IR reflow 260C	3 cycles	for Test #7, 8, 9 & 10	lots	x	Pass						
3	EXTERNAL VISUAL (EV)	MIL-STD-750 METHOD 2071	PER SPEC		ication parts d for testing	х	Pass	Х	Pass	х	Pass	Х	Pass
4	PARAMETRIC VERIFICATION (PV)	-55C, 25C, 85C, 125C, 150C	Operating Range, Per Data Sheet	0/25	3 wafer lots	х	pass	х	Pass	х	Pass	x	Pass
	FORWARD SURGE	MIL-750D, METHOD 4066	PER DATA SHEET	0/45	3 wafer lots	Х	pass	X	pass	Х	pass	X	Pass
<b>—</b>	JONGE	2 . 335,	168 Hrs	0/43	2	X	pass	X	pass	X	pass	X	Pass
5	HTRB	Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1	500 Hrs	0/77	3 wafer lots	X	pass	X	pass	X	pass	X	Pass
			1000 Hrs	0/77	1	X	pass	X	pass	X	pass	X	Pass
			168 Cycles	0/77	2.4	X	pass	X	pass	X	pass	X	pass
7	TC	Ta=-65C to 150C or Max Tj, PER JESD22A-104	500 Cycles	0/77	3 Assembly	X	pass	X	pass	X	pass	X	pass
1	[	,	1000 Cycles	0/77	lots	X	pass	X	pass	X	pass	X	pass
		Ta=121°C 15PSIG 100%RH; PER JESD22-			3 Assembly								
8	PCT/AC	A102	96 Hrs	0/77	lots	Х	pass	Х	pass	Х	pass	Х	pass
			168 Hrs	0/77	1	Х	pass	Х	pass	X	pass	X	pass
9 alt	ннт	Ta=85ºC, 85% RH,	500 Hrs	0/77	3 wafer lots	X	pass	X	pass	X	pass	X	pass
	<u>                                      </u>	<u>                                       </u>	1000 Hrs	0/77	<u> </u>	X	pass	X	pass	X	pass	X	pass
			2520 Cycles	0/77		X	pass	X	pass	X	pass	X	pass
10	IOL	MIL-STD-750 Method 1037 (N/A for TVS)	7560 Cycles	0/77	3 wafer lots	X	pass	X	pass	X	pass	X	pass
1			15000 Cycles	0/77	1	X	pass	X	pass	X	pass	X	pass
	FCD	HBM (AEC-Q101-001)	PER DATA SHEET	0/30	1 wafer lot	X	pass	X	pass	X	pass	X	pass
11	ESD	CDM (AEC-Q100-005)	PER DATA SHEET	0/30	1 wafer lot	X	pass	X	pass	X	pass	X	pass
12	DPA	AEC Q101-004 SEC. 4		0/2	1 Assembly lot	х	pass	х	pass	х	pass	х	pass
13	Package Physical Dimemsions (PD)	JESD22-B100	Package Outline	0/30	1 Assembly lot	х	pass	х	pass	х	pass	х	pass
20	RESISTANCE TO	JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)	PER SPEC	0/30	1 Assembly lot	х	pass	х	pass	х	pass	x	pass
	SOLDER HEAT (RSH)			0/10 1 Assembly lot									1
21	SOLDER HEAT (RSH)  Solderability	J-STD-002; JESD22B102 (245C +0/5S)	5 Seconds	0/10		Х	pass	х	pass	х	Pass	х	pass
21		J-STD-002; JESD22B102 (245C +0/5S)  JESD 24-3, 24-4, 24-6 AS APPROPRIATE	5 Seconds PER SPEC	0/10		x	pass	x x	pass	x	Pass Pass	x x	pass
	Solderability				lot 1 Assembly								

# Certificate of Design, Construction & Qualification



Description: Qualtify SFAB wafer source into existing qualified SBR parts at ERIS.

Product   Prod		Category					Qual Device 1		Qual Device 2	
Money			Part Number							
Money										
Worker		· ·							28.6*10.11*4.57mm	
Wide		Wafer					SS112AA0045WEB2		SS112AA0120WJC2	
Worder		Wafer	Die Size (W/L/Thickness) - After Saw				2.84 x 2.84 x 0.262 mm		2.84 x 2.84 x 0.262 mm	
Worker   Worker   Provided Lycyr Manufact Provided L		Wafer	Die Process / Technology				SBR		SBR	
Water		Wafer	Wafer FAB/ Location				SFAB		SFAB	
Wilson		Wafer	Wafer Diameter				6 inch		6 inch	
Trail   Number of Pink Lines   1 may   1 may		Wafer	Front Metal Type				Ti-Ni-Ag		Ti-Ni-Ag	
Water   Number of Residency   Secretary   Secretary		Wafer	Front Metal Layer Number/ Thickness							
Worder   Secretary Paper (a) Layered   Worder   Assertant Transport (a) Layered   Assertant   Assert		Wafer					1 Poly			
Wider										
Accessingly										
Assemble   Dear Name Vertical Display of June 1 (1997)   Assemble   Dear Name Vertical Display of Dear Name Vertical Display									·	
According										
Assembly										
Assertably   Ass		· ·								
Assembly   Secretary   Soldering   Solde										
Ascendary		· ·					·		·	
Assembly										
Assembly   Termed individe pleasing state   Assembly   Termed individe pleasing state   Assembly   Assembly		· · · · · · · · · · · · · · · · · · ·					·			
Assertidy   Prevented patter gibt came Area)		· ·								
Assembly   Assembly   Assembly   Exert Frame Name Name   Assembly   Assembly   Exert Frame Name Name   Assembly   Assem										
Assembly   Assembly   Leadframe Page   Assembly   Assembly   Leadframe Martinal   Assembly   Asse		· · · · · · · · · · · · · · · · · · ·								
Assembly   Lead frame Mandatures   Assembly   Lead frame Mandatures   Assembly   Assem							·		· · · · · · · · · · · · · · · · · · ·	
Assembly   Leaf Frame Material		· ·							•	
Assembly   Lead Praise Membracturer   Assembly   Molding Compount Type   Assembly			**							
Assembly   Molf Compound Type   Molf Compound Typ		Assembly	Leadframe Material				Cu		Cu	
Ascentably   Asc		Assembly	Lead Frame Manufacturer				JIH LONG INDUSTRY CO., LTD.		JIH LONG INDUSTRY CO., LTD.	
Ascentably   Asc		Assembly	Molding Compound Type				EME-E120G		FMF-F120G	
Assembly   Carden Compound (Yes/No)		· ·								
Assembly   Test   Inject   Assembly   Asse							_			
Assembly   Assembly   Test Strol (Location   Froduct		,								
Assembly   Fest Ste/ Jocation   Product   Product   DataSheet										
Product   Product   DataSibest   DataSibest   District   DataSibest		· ·								
Product										
Reliability and Characterization Testing										
Reside							DS#30981		DS#31094	
According   Comparison   Comp			Reliability and Characterization Testing							
3   [EV]   MIL-STD-750 METHOD 2071   PER SPEC   Testing   X   Pass   X   Pa										
VERIFICATION (PV)  55C, 25C, 25C, 25C, 25C, 25C, 25C, 25C,	Q101	Test	Test Conditions	Duration / Limits	Failed/ Sample Size	# of Lots	X = Test Needed		X = Test Needed	Results Pass/Fail
Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1   168 Hrs   0/77   3 wafer lots   X   Pass   X   P	Q101 (D)	EXTERNAL VISUAL			Failed/ Sample Size per Lot	tion parts submitted for		Pass/Fail		
Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1   500 Hrs   0/77   3 wafer lots   X   Pass   X   P	Q101 (D)	EXTERNAL VISUAL (EV) PARAMETRIC	MIL-STD-750 METHOD 2071	PER SPEC Operating Range,	Failed/ Sample Size per Lot	tion parts submitted for testing	х	Pass/Fail Pass	х	Pass/Fail
1000 Hrs	Q101 (D)	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)	MIL-STD-750 METHOD 2071 -55C, 25C, 85C, 125C, 150C	PER SPEC  Operating Range, Per Data Sheet	Failed/ Sample Size per Lot  All qualificat  0/25	tion parts submitted for testing  3 wafer lots	X X	Pass/Fail Pass Pass	X X X	Pass/Fail Pass
TC Ta=-65C to 150C or Max Tj, PER JESD22A-104	Q101 (D)	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)	MIL-STD-750 METHOD 2071 -55C, 25C, 85C, 125C, 150C	PER SPEC  Operating Range, Per Data Sheet PER DATA SHEET	Failed/ Sample Size per Lot  All qualificat  0/25  0/45	tion parts submitted for testing  3 wafer lots	X X	Pass/Fail Pass Pass Pass	X X X	Pass/Fail Pass
TC	Q101 (D)	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE	MIL-STD-750 METHOD 2071 -55C, 25C, 85C, 125C, 150C MIL-750D, METHOD 4066	PER SPEC  Operating Range, Per Data Sheet PER DATA SHEET 168 Hrs	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77	tion parts submitted for testing  3 wafer lots  3 wafer lots	X X X X X	Pass/Fail  Pass  Pass  Pass  Pass  Pass	X X X X X X	Pass/Fail  Pass  Pass  Pass
100 Cycles	Q101 (D)	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE	MIL-STD-750 METHOD 2071 -55C, 25C, 85C, 125C, 150C MIL-750D, METHOD 4066	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77	tion parts submitted for testing  3 wafer lots  3 wafer lots	X X X X X	Pass Pass Pass Pass Pass	X X X X X X	Pass/Fail  Pass  Pass  Pass  Pass  Pass
8 PCT/AC	3 4	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles	Failed / Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77	tion parts submitted for testing  3 wafer lots  3 wafer lots  3 wafer lots	X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X	Pass/Fail  Pass  Pass  Pass  Pass  Pass  Pass
8 PCT/AC A102 96 Hrs 0/77 3 Assembly lots X Pass X Pas  168 Hrs 0/77 3 Assembly lots X Pass X Pas  168 Hrs 0/77 3 Assembly lots X Pass X Pas  168 Hrs 0/77 3 Assembly lots X Pass X Pas  100 Hrs 0/77 3 Wafer lots X Pass X Pas  100 Hrs 0/77 3 Wafer lots X Pass X Pas  100 Hrs 0/77 3 Wafer lots X Pass X Pas  100 Hrs 0/77 3 Wafer lots X Pass X Pas  100 Hrs 0/77 3 Wafer lots X Pass X Pas  100 Hrs 0/77 3 Wafer lots X Pass X Pas  100 Hrs 0/77 3 Wafer lots X Pass X Pas  110 ESD CoDM (AEC-Q101-001) PER DATA SHEET 0/30 1 Wafer lot X Pass X Pas  111 ESD COM (AEC-Q101-002) PER DATA SHEET 0/30 1 Wafer lot X Pass X Pas  112 DPA AEC Q101-004 SEC. 4 0/2 1 Assembly lot X Pass X Pas  113 Dimensions (PD) JESD22-B100 Package Outline 0/30 1 Assembly lot X Pass X Pas  120 RESISTANCE TO SOLDER HEAT (RSH) JESD22-B102 (245C + 0/55) 5 Seconds 0/10 1 Assembly lot X Pass X Pas  121 Solderability J-STD-002; JESD22B102 (245C + 0/55) 5 Seconds 0/10 1 Assembly lot X Pass X Pas  122 Die Shear Mil-STD-750 (2017) Cpk>1.66 0/5 1 Assembly lot X Pass X Pas  123 Die Shear Mil-STD-750 (2017) Cpk>1.66 0/5 1 Assembly lot X Pass X Pas  124 Submitted By: Shane 2016-04-08	3 4	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77	tion parts submitted for testing  3 wafer lots  3 wafer lots  3 wafer lots	X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass  Pass  Pass  Pass  Pass  Pass  Pass  Pass  Pass
9 alt HHT Ta=85°C, 85% RH, 500 Hrs 0/77	3 4	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77	tion parts submitted for testing  3 wafer lots  3 wafer lots  3 wafer lots	X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
Package Physical   DPA   AEC Q101-002   PER DATA SHEET   O/30   1 wafer lot   X   Pass   X   Pass	3 4 5	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77  0/77	tion parts submitted for testing  3 wafer lots  3 wafer lots  3 wafer lots  3 wafer lots	X X X X X X X X X X X X X	Pass/Fail  Pass	X X X X X X X X X X X X X	Pass/Fail  Pass
100 Hrs   0/77	3 4 5	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles  96 Hrs	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77	tion parts submitted for testing  3 wafer lots  3 wafer lots  3 wafer lots  3 wafer lots	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
10	3 4 5 7	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles  96 Hrs  168 Hrs	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77  0/77	3 wafer lots 3 Assembly lots 3 Assembly lots	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
The first of the	3 4 5 7	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles  96 Hrs  168 Hrs  500 Hrs	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77  0/77	3 wafer lots 3 Assembly lots 3 Assembly lots	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
15000 Cycles   0/77       X	3 4 5 7	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles  1000 Cycles  168 Hrs  500 Hrs  168 Hrs  1000 Hrs	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77	3 wafer lots 3 Assembly lots 3 Assembly lots	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
HBM	3 4 5 7 8 9 alt	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC  HHT	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102  Ta=85°C, 85% RH,	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles  1000 Hrs  168 Hrs  500 Hrs  2520 Cycles	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77	tion parts submitted for testing  3 wafer lots  3 wafer lots  3 wafer lots  3 Assembly lots  3 Assembly lots  3 wafer lots	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
MM	3 4 5 7 8 9 alt	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC  HHT	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102  Ta=85°C, 85% RH,	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles  1000 Hrs  168 Hrs  500 Hrs  1000 Hrs  2520 Cycles  7560 Cycles	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77	tion parts submitted for testing  3 wafer lots  3 wafer lots  3 wafer lots  3 Assembly lots  3 Assembly lots  3 wafer lots	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
12         DPA         AEC Q101-004 SEC. 4         0/2         1 Assembly lot         X         Pass         X         Pa           13         Package Physical Dimensions (PD)         JESD22-B100         Package Outline         0/30         1 Assembly lot         X         Pass         X         Pass           20         RESISTANCE TO SOLDER HEAT (RSH)         JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)         PER SPEC         0/30         1 Assembly lot         X         Pass         X         Pa           21         Solderability         J-STD-002; JESD22B102 (245C +0/5S)         5 Seconds         0/10         1 Assembly lot         X         Pass         X         Pa           22         THERMAL RESISTANCE (TR)         JESD 24-3, 24-4, 24-6 AS APPROPRIATE         PER SPEC         0/10         1 Assembly lot         X         Pass         X         Pa           25         Die Shear         MIL-STD-750 (2017)         Cpk>1.66         0/5         1 Assembly lot         X         Pass         X         Pa           Submitted By:         Shane 2016-04-08         Shane 2016-04-08         Shane 2016-04-08         Assembly lot         X         Pass         X         Pass	3 4 5 7 8 9 alt	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC  HHT	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles  96 Hrs  168 Hrs  500 Hrs  1000 Hrs  2520 Cycles  7560 Cycles	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
13	3 4 5 7 8 9 alt	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC  HHT  IOL	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles  96 Hrs  168 Hrs  500 Hrs  1000 Hrs  2520 Cycles  7560 Cycles  15000 Cycles	Failed/ Sample Size per Lot  All qualification   0/25  0/45  0/77	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
13       Package Physical Dimensions (PD)       JESD22-B100       Package Outline       0/30       1 Assembly lot       X       Pass       X       Pass         20       RESISTANCE TO SOLDER HEAT (RSH)       JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)       PER SPEC       0/30       1 Assembly lot       X       Pass       X       Pass         21       Solderability       J-STD-002; JESD22B102 (245C +0/5S)       5 Seconds       0/10       1 Assembly lot       X       Pass       X       Pa         22       THERMAL RESISTANCE (TR)       JESD 24-3, 24-4, 24-6 AS APPROPRIATE       PER SPEC       0/10       1 Assembly lot       X       Pass       X       Pa         25       Die Shear       MIL-STD-750 (2017)       Cpk>1.66       0/5       1 Assembly lot       X       Pass       X       Pa         Submitted By:       Shane 2016-04-08       Shane 2016-04-08       Shane 2016-04-08       Assembly lot       X       Pass       X       Pa	3 4 5 7 8 9 alt	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC  HHT  IOL	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001) CDM (AEC-Q100-005)	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles  96 Hrs  168 Hrs  500 Hrs  1000 Hrs  2520 Cycles  7560 Cycles  15000 Cycles  PER DATA SHEET  PER DATA SHEET	Failed/ Sample Size per Lot  All qualification   0/25  0/45  0/77  0/30  0/30	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 1 wafer lot 1 wafer lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
RESISTANCE TO   SOLDER HEAT (RSH)   JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)   PER SPEC   0/30   1 Assembly lot   X   Pass   X	3 4 5 7 8 9 alt 10	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC  HHT  IOL  ESD	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q100-005)  MM (AEC-Q101-002)	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles  96 Hrs  168 Hrs  500 Hrs  1000 Hrs  2520 Cycles  7560 Cycles  15000 Cycles  PER DATA SHEET  PER DATA SHEET	Failed/ Sample Size per Lot  All qualification   0/25  0/45  0/77  0/30  0/30  0/30	3 wafer lots 3 Assembly lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
SOLDER HEAT (RSH)	9 alt 10 11	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC  HHT  IOL  ESD  DPA Package Physical	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q101-002)  MM (AEC-Q101-002)  AEC Q101-004 SEC. 4	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  168 Cycles  500 Cycles  1000 Cycles  1000 Hrs  168 Hrs  500 Hrs  169 Hrs  169 Hrs  169 Hrs  1000 Hrs  2520 Cycles  7560 Cycles  15000 Cycles  PER DATA SHEET  PER DATA SHEET	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/30  0/30  0/30  0/2	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
22       THERMAL RESISTANCE (TR)       JESD 24-3, 24-4, 24-6 AS APPROPRIATE       PER SPEC       0/10       1 Assembly lot       X       Pass       X       Pa         25       Die Shear       MIL-STD-750 (2017)       Cpk>1.66       0/5       1 Assembly lot       X       Pass       X       Pa         Summary: Shane 2016-04-08         Submitted By: Shane 2016-04-08	9 alt 10 11 12 13	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC  HHT  IOL  ESD  DPA  Package Physical Dimemsions (PD)	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q101-002)  AEC Q101-004 SEC. 4  JESD22-B100	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles  1000 Hrs  168 Hrs  500 Hrs  1000 Hrs  2520 Cycles  7560 Cycles  15000 Cycles  PER DATA SHEET  PER DATA SHEET  PER DATA SHEET  Package Outline	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/30  0/30  0/30  0/2  0/30	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
22   RESISTANCE (TR)   JESD 24-3, 24-4, 24-6 AS APPROPRIATE   PER SPEC   0/10   1 Assembly lot   X   Pass   X   Pa	9 alt 10 11 12 13 20	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC  HHT  IOL  ESD  DPA  Package Physical Dimemsions (PD)  RESISTANCE TO SOLDER HEAT (RSH)	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-102  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q100-005)  MM (AEC-Q101-002)  AEC Q101-004 SEC. 4  JESD22-B100  JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Cycles  1000 Cycles  96 Hrs  168 Hrs  500 Hrs  1000 Hrs  2520 Cycles  7560 Cycles  15000 Cycles  PER DATA SHEET  PER DATA SHEET  PER DATA SHEET  PER DATA SHEET  PER SPEC	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/30  0/30  0/30  0/30  0/30  0/30	3 wafer lots 3 Assembly lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 seembly lot 1 Assembly lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
Summary: Shane 2016-04-08 Submitted By: Shane 2016-04-08	9 alt 10 11 12 13 20	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC  HHT  IOL  ESD  DPA Package Physical Dimemsions (PD) RESISTANCE TO SOLDER HEAT (RSH) Solderability	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-102  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q100-005)  MM (AEC-Q101-002)  AEC Q101-004 SEC. 4  JESD22-B100  JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Cycles  1000 Cycles  96 Hrs  168 Hrs  500 Hrs  1000 Hrs  2520 Cycles  7560 Cycles  15000 Cycles  PER DATA SHEET  PER DATA SHEET  PER DATA SHEET  PER DATA SHEET  PER SPEC	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/30  0/30  0/30  0/30  0/30  0/30	3 wafer lots 3 Assembly lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 seembly lot 1 Assembly lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
Submitted By: Shane 2016-04-08	9 alt 10 11 12 13 20 21	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC  HHT  IOL  ESD  DPA Package Physical Dimemsions (PD) RESISTANCE TO SOLDER HEAT (RSH) Solderability THERMAL	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q101-002)  AEC Q101-004 SEC. 4  JESD22-B100  JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)  J-STD-002; JESD22B102 (245C +0/5S)	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Cycles  1000 Cycles  1000 Hrs  168 Hrs  500 Hrs  1000 Hrs  2520 Cycles  7560 Cycles  15000 Cycles  PER DATA SHEET  PER SPEC  5 Seconds	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/30  0/30  0/30  0/30  0/30  0/30  0/30  0/30  0/30  0/30  0/30  0/30  0/30  0/30  0/30  0/30  0/30  0/30  0/30	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 sasembly lot 1 Assembly lot 1 Assembly lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
· ·	9 alt 10 11 12 13 20 21 22	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC  HHT  IOL  ESD  DPA Package Physical Dimemsions (PD) RESISTANCE TO SOLDER HEAT (RSH) Solderability THERMAL RESISTANCE (TR) Die Shear	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q100-005)  MM (AEC-Q101-002)  AEC Q101-004 SEC. 4  JESD22-B100  JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)  J-STD-002; JESD22B102 (245C +0/5S)  JESD 24-3, 24-4, 24-6 AS APPROPRIATE  MIL-STD-750 (2017)	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Cycles  1000 Cycles  1000 Hrs  168 Hrs  500 Hrs  1000 Hrs  2520 Cycles  7560 Cycles  15000 Cycles  PER DATA SHEET  PER DATA SHEET  PER DATA SHEET  PER DATA SHEET  PER SPEC  5 Seconds  PER SPEC	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/70  0/70  0/30  0/30  0/30  0/30  0/30  0/30  0/10  0/10	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 sasembly lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass
Annroyed Ry	9 alt 10 11 12 13 20 21 22	EXTERNAL VISUAL (EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC  PCT/AC  HHT  IOL  ESD  DPA Package Physical Dimemsions (PD) RESISTANCE TO SOLDER HEAT (RSH) Solderability THERMAL RESISTANCE (TR) Die Shear Summary:	MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q100-005)  MM (AEC-Q101-002)  AEC Q101-004 SEC. 4  JESD22-B100  JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)  J-STD-002; JESD22B102 (245C +0/5S)  JESD 24-3, 24-4, 24-6 AS APPROPRIATE  MIL-STD-750 (2017)  Shane 2016-04-08	PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Cycles  1000 Cycles  1000 Hrs  168 Hrs  500 Hrs  1000 Hrs  2520 Cycles  7560 Cycles  15000 Cycles  PER DATA SHEET  PER DATA SHEET  PER DATA SHEET  PER DATA SHEET  PER SPEC  5 Seconds  PER SPEC	Failed/ Sample Size per Lot  All qualificat  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/70  0/70  0/30  0/30  0/30  0/30  0/30  0/30  0/10  0/10	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 sasembly lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass  Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass/Fail  Pass  Pass

Approved By:



Description: Qualtify SFAB wafer source into existing qualified SBR parts at SAT.

	o o o o	_									SAT														
	Category					Qual Device 1		Qual Device 2		Qual Device 3		Qual Device 4		Qual Device 5		Qual Device 6		Qual Device 7		Qual Device 8		Qual Device 9		Qual Device 10	
	Product	Part Number				SBR1A400P1		SBR02U100LP		SBR60A20CT		SBR60A150CT		SBR60A300CT		SBR02E20LP		SBR20B100CT		SBR8E60P5		SBR10E45P5		SBR30E45CTB	
	Assembly Assembly	Package Type Package Size		-		POWERDI-123 3.7*1.775*0.98mm		DFN1006-2 1.0*0.6*0.5mm		TO220-3L 28.6*10.11*4.57mm		T0220-3L 28.6*10.11*4.57mm		TO220-3L .6*10.11*4.57mm		DFN1006-2 1.0*0.6*0.5mm		TO220-3L 28.6*10.11*4.57mm		PowerDi-5 6.5*3.97*1.10mm	-	PowerDi-5 6.5*3.97*1.10mm	-	TO-263AB 15.24*10.11*4.57mm	
-	Wafer	Die Name(s)		-		SS044AA0400WIA2		SS014AA0100AGB7		SS146AA0020AEC2		SS146AA0150AJB2		146AA0300AHA1		SS014AA0020AEB7		SS082AA0100AGB2		SS102AA0060WEC2	- 1	SS112AA0045WEA2	-	SS112AA0045AEA2	
<del> </del>	Wafer	Die Size (W/L/Thickness) - After Saw		-		1.156*1.156*0.25mm		0.40*0.35*0.14mm		3.504*3.922*0.25mm		3.504*3.922*0.25mm		04*3.922*0.29mm		0.40*0.35*0.14mm		2.086*2.086*0.262mm		2.610*2.610*0.262mm	ŀ	2.840*2.840*0.262mm	-	2.84 x 2.84 x 0.262mm	
	Wafer	Die Process / Technology				SBR		SBR		SBR		SBR	0.001	SBR		SBR		SBR		SBR	ı	SBR		SBR	
	Wafer	Wafer FAB/ Location				SFAB		SFAB		SFAB		SFAB		SFAB		SFAB		SFAB		SFAB	1	SFAB		SFAB	
	Wafer	Wafer Diameter				6 inch		6 inch		6 inch		6 inch		6 inch		6 inch		6 inch		6 inch		6 inch		6 inch	
	Wafer	Front Metal Type				Ti-Ni-Ag		Al-Si-Cu		Al-Si-Cu		Al-Si-Cu		Al-Si-Cu		Al-Si-Cu		Al-Si-Cu		Ti-Ni-Ag		Ti-Ni-Ag		Al-Si-Cu	
	Wafer	Front Metal Layer Number/ Thickness				Al-Si-Cu/25kA; Ti-Ni-		Al-Si-Cu/40kA		Al-Si-Cu/40kA		Al-Si-Cu/40kA	Al	Al-Si-Cu/40kA		Al-Si-Cu/40kA		Al-Si-Cu/40kA		AlSiCu 10K+TiNiAg 18K		AlSiCu 10K+TiNiAg 18K		Al-Si-Cu/40kA	
-		· ·		-		Ag/1kA/2kA/15kA														-	- 1		-		
-	Wafer Wafer	Number of Poly Layers  Back Metal Type (All Layers)		-		1 poly Ti-Ni-Ag		1 poly Ti-Ni-Ag		1 poly Ti-Ni-Ag		1 poly Ti-Ni-Ag		1 poly Ti-Ni-Ag		1 poly Ti-Ni-Ag		1 Poly Ti-Ni-Ag		1 Poly Ti-Ni-Ag	ŀ	1 Poly Ti-Ni-Ag	-	1 Poly Ti-Ni-Ag	
<del> </del>	Wafer	Back Metal Thickness (All Lavers)		-		1kA/ 2kA/ 8kA		1kA/ 2kA/ 8kA		1kA/ 2kA/ 8kA		1kA/ 2kA/ 8kA		1kA/ 2kA/ 8kA		1kA/ 2kA/ 8kA		1kA/ 2kA/ 8kA		1kA/ 2kA/ 8kA	ŀ	1kA/ 2kA/ 8kA	-	1kA/2kA/8kA	
+	Wafer	No of masks Steps		-		6		4		4		5	16	5		4		4		4	- 1	4		4	
	Assembly	Die quantity per package (e.g. single or dual dies)				Single		Single		Single		Single		Single		Single		Dual		Single	ı	Single		Dual	
	Assembly	Die Attach Method (DB Epoxy/Solder Type)				SOLDER		Ероху		Soft solder		Soft solder		Soft solder		Ероху		Soft Solder		Solder		Solder		Soft Solder	
	Assembly	Die Attach Material/ Supplier				ES-500-SPA/Early Sun		QMI519/HENKEL		Pb92.5Sn5Ag2.5/HERAEUS		Pb92.5Sn5Ag2.5/HERAEUS	Ph92 55	5Sn5Ag2.5/HERAEUS		QMI519/HENKEL		Pb92.5Sn5Ag2.5/HERAEUS		NC-SMQ51SC/Indium		NC-SMQ51SC/Indium		Pb92.5Sn5Ag2.5/HERAEUS	
								2																	
	Assembly	Bond Wire/Clip Bond Material/ Supplier				CLIP/HITACHI CABLE		Au/HERAEUS&NBKQ		AI/HERAEUS&Nichetech		AI/HERAEUS&Nichetech	AI/HER	ERAEUS&Nichetech		Cu/TANAKA&HERAEUS&NBK		AI/HERAEUS/Nichetech		Clip/HITACHI CABLE		Clip/HITACHI CABLE		AI/HERAEUS/Nichetech	
-	Assembly	Bond Type (at Die)		-		Colder Curing		Thermo sonic		ultrasonic		ultrasonic		ultrasonic		Thermo sonic		Ultrasonic		Solder	- 1	Solder	-	Ultrasonic	
<del> </del>	Assembly	Bond Type (at LF)		-		Solder Curing Solder Curing		Thermo sonic		ultrasonic		ultrasonic		ultrasonic		Thermo sonic		Ultrasonic		Solder	ŀ	Solder	-	Ultrasonic	
	Assembly	No. of bond over active area		1		1		2		6		6		6		2		4		1	- 1	1		4	
	Assembly	Glass Transistion Temp				135°C		135°C		135°C		135°C		135°C		135°C		135°C		130°C	ı	130°C		160°C	
	Assembly	Terminal Finish (Plating) Material				Matt Tin		NiPdAu		Pbfree		Pbfree		Pbfree		NiPdAu		100% Matte Tin		Pbfree	1	Pbfree		100% Matte Tin	
	Assembly	Header plating (Die Land Area)				Bare		NiPdAu		Bare copper		Bare copper	В	Bare copper		NiPdAu		Bare copper		Spot Ag	ľ	Spot Ag		Bare copper	
	Assembly	Wire Diameter		1		KLP00011		1.0mil		15mil		15mil		15mil		1.0mil		20mil		KLP00014	[	KLP00014		15mil	
	Assembly	Leadframe Type		4		KLF00281		SLP1006P2		TO220-3L C	<b> </b>	TO220-3L C	1	T0220-3L C		SLP1006P2		TO220-3L C(bare copper)		PowerDi-5 F type	ļ	PowerDi-5 F type		TO263-3L bare	
	Assembly	Leadframe Material		4		CDA194HH		C7025HH		KFC YANNA (AIDKO	ļ	KFC YAAVAA (AIRIKO		KFC		C7025HH		KFC		CDA194FH	ļ	CDA194FH		KFC YANNA ( NIDKO	
	Assembly Assembly	Lead Frame Manufacturer Molding Compound Type		1		Hitachi Cable EME-G600		ASM&PBE&MHT EME-G770HCD	<b> </b>	XMYM/ NBKQ KTMC1050G	<del>                                     </del>	XMYM/ NBKQ KTMC1050G		XMYM/ NBKQ KTMC1050G		ASM&PBE&MHT EME-G770HCD		XMYM/ NBKQ KTMC1050G		NBKQ EME-G700LA	ŀ	NBKQ EME-G700LA	-	XMYM/ NBKQ KTMC1050G	
	Assembly	Molding Compound Type  Mold Compound Material Manufacturer		1		SUMITOMO		SUMITOMO		KTMC1050G KCC	1	KTMC1050G KCC	K	KCC KCC		SUMITOMO		KTMC1050G KCC		Sumitomo	ŀ	Sumitomo	-	KTMC1050G KCC	
	Assembly	Green Compound (Yes/No)		1		Yes		Yes		Yes	1	Yes		Yes		Yes		Yes		Yes	ŀ	Yes	-	Yes	
	Assembly	Lead-Free (Yes/No)		1		Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	ŀ	Yes	-	Yes	1
	Assembly	Assembly Site/ Location		1		SKE		DSH		DSH		DSH		DSH		DSH		SAT		SAT		SAT	l l	SAT	1
	Assembly	Test Site/ Location				DSH		DSH		DSH		DSH		DSH		DSH		SAT		SAT		SAT		SAT	
	Product	Max Junction Temp				175°C		150°C		150°C		175°C		175°C		150°C		175°C		150°C		150°C		150°C	
	Product	Max Thermal resistance Junc (case)				15*C/W		-		2*C/W		1.2*C/W		8*C/W		15*C/W		N/A		15 *C/W		15 *C/W		N/A	
	Product	Max Thermal resistance Junc (amibent)		-		175*C/W		235*C/W		13*C/W		8*C/W		52*C/W		300*C/W		N/A		100 *C/W	- 1	100 *C/W	-	N/A	
	Product	DataSheet				DS37709		DS31134		DS31421		DS31133		DS31200		DS38607		DS38091		DS38002		DS37867		DS38052	
		Reliability and Characterization Testing																							
# in AEC- Q101	Test	Test Conditions	Duration / Limits	Accept on # Failed/ Sample	# of Lots	X = Test Needed	Results Pass/	X = Test Needed	Results Pass/	X = Test Needed	Results Pass/	QBS Test Completed	Results Pass/ QBS 1	S Test Completed	Results Pass/	QBS Test Completed	Results Pass/	QBS Test Completed	Results Pass/ Fail	QBS Test Completed	Results Pass/ Fail	QBS Test Completed	Results Pass/	QBS Test Completed	Results Pass/ Fail
(D)				Size per Lot			Fail		Fail		Fail	Q	Fail		Fail		Fail		Fall		rali		Fail		Fall
(D)				Size per Lot			Fail		Fail		Fail		Fail	·	Fail		Fail		raii		raii		Fail		Fall
(D)		Bake 125C	24 Hrs	Size per Lot		X	Fail pass	X	Fail pass		Fail		Fail	·	Fail	X	<b>Fail</b> pass		rdii	X	pass	X	<b>Fail</b> pass	x	pass
(D)	MSL1 Pre-	Bake 125C Soak 85C, 85% RH	24 Hrs 168Hrs	Size per Lot SMD only,	2 Accombly late	X X		X X	1		Fail		Fail	·	Fail	X X			rdii	X X		X X		X X	
(D) 2	MSL1 Pre- conditioning	Soak 85C, 85% RH	168Hrs	Size per Lot  SMD only, for Test #7,	3 Assembly lots	X X	pass pass	X X X	pass pass		Fail		Fail		Fail	X X X	pass pass		rdii	X X	pass pass	X X X	pass pass	X X	pass pass
( <b>D</b> )				Size per Lot SMD only,	3 Assembly lots	^	pass	^	pass		Fail		Fail		Fail	^	pass		raii		pass	X X X	pass	^	pass
(D) 2		Soak 85C, 85% RH  IR reflow 260C	168Hrs 3 cycles	SMD only, for Test #7, 8, 9 & 10	3 Assembly lots	x	pass pass pass	x	pass pass pass	v		v		, , , , , , , , , , , , , , , , , , ,		x	pass pass pass			х	pass pass pass		pass pass pass	х	pass pass pass
2 3 E	conditioning	Soak 85C, 85% RH	168Hrs	SMD only, for Test #7, 8, 9 & 10		^	pass pass	^	pass pass	x	pass	x	pass	x	pass	^	pass pass	x	pass		pass pass	x x x	pass pass	^	pass pass
2 3	conditioning  EXTERNAL VISUAL  EV)	Soak 85C, 85% RH  IR reflow 260C	168Hrs 3 cycles PER SPEC	SMD only, for Test #7, 8, 9 & 10	tion parts submitted for	x	pass pass pass	x	pass pass pass	X		x		x		x	pass pass pass	х		х	pass pass pass		pass pass pass	х	pass pass pass
3 (	conditioning  EXTERNAL VISUAL  EV)  PARAMETRIC	Soak 85C, 85% RH  IR reflow 260C	168Hrs 3 cycles PER SPEC Operating Range,	SMD only, for Test #7, 8, 9 & 10	tion parts submitted for	x	pass pass pass	x	pass pass pass	x		x		x x		x	pass pass pass	x x		х	pass pass pass		pass pass pass	х	pass pass pass
4	conditioning  EXTERNAL VISUAL  EV)  PARAMETRIC  VERIFICATION (PV)	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25	tion parts submitted for testing 3 wafer lots	x x x	pass pass pass pass	x x x	pass pass pass pass pass	x	pass	x x	pass	x x	pass	x x x	pass pass pass pass pass		pass	x x x	pass pass pass pass	x x	pass pass pass	x x x	pass pass pass pass pass
4	conditioning  EXTERNAL VISUAL  EV)  PARAMETRIC	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet PER DATA SHEET	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45	tion parts submitted for testing	x	pass pass pass pass pass	x	pass pass pass pass pass pass		pass pass	x x x	pass pass	x	pass pass	x	pass pass pass pass pass	x x x	pass pass	x	pass pass pass pass pass	х	pass pass pass pass pass pass	x x	pass pass pass pass pass pass
4	conditioning  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet PER DATA SHEET 168 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77	tion parts submitted for testing 3 wafer lots 3 wafer lots	x x x x x x	pass pass pass pass pass pass	x x x x x	pass pass pass pass pass pass	x	pass pass pass pass	X X X	pass pass pass pass	x x	pass pass pass pass	x x x x x	pass pass pass pass pass pass		pass pass pass pass	x x x	pass pass pass pass pass pass pass pass	x x x x	pass pass pass pass pass pass pass pass	x x x x x x	pass pass pass pass pass pass
4	conditioning  EXTERNAL VISUAL  EV)  PARAMETRIC  VERIFICATION (PV)	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet PER DATA SHEET 168 Hrs 500 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/77	tion parts submitted for testing 3 wafer lots	x x x	pass pass pass pass pass pass pass pass	x x x x x x x x	pass pass pass pass pass pass pass pass	x	pass pass pass pass pass	x x	pass pass pass pass pass	x x	pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass		pass pass pass pass pass	x x x	pass pass pass pass pass pass pass pass	x x x x x	pass pass pass  pass  pass  pass  pass  pass  pass  pass  pass  pass  pass	X X X X X X X X	pass pass pass pass pass pass pass pass
4	conditioning  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet PER DATA SHEET 168 Hrs 500 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/77	tion parts submitted for testing 3 wafer lots 3 wafer lots	x x x x x x	pass pass pass pass pass pass pass pass	x x x x x	pass pass pass pass pass pass pass pass	x	pass pass pass pass pass pass	X X X	pass pass pass pass pass pass pass	x x	pass  pass  pass  pass  pass  pass  pass  pass	x x x x x	pass pass pass pass pass pass pass pass		pass pass pass pass pass pass pass	x x x	pass pass pass pass pass pass pass pass	x x x x	pass pass pass  pass  pass  pass  pass  pass  pass  pass  pass pass pass pass pass	x x x x x x	pass pass pass pass pass pass pass pass
4	conditioning  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet PER DATA SHEET 168 Hrs 500 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/77	tion parts submitted for testing 3 wafer lots 3 wafer lots	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X	pass pass pass pass pass	X X X X X X X X	pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass		pass pass pass pass pass	x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X	pass pass pass  pass  pass  pass  pass  pass  pass  pass  pass  pass  pass  pass	X X X X X X X X X X X X	pass pass pass pass pass pass pass pass
4	CONDITION OF THE PROPERTY OF T	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet PER OATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/77  0/77  0/77	cion parts submitted for testing  3 wafer lots  3 wafer lots  3 wafer lots	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X	pass  pass  pass  pass  pass  pass  pass  pass  pass	X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass  pass  pass  pass  pass pass pass pass pass pass		pass pass pass pass pass pass pass	x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X	pass pass pass  pass  pass  pass  pass  pass  pass  pass  pass  pass  pass  pass  pass  pass  pass  pass  pass	X X X X X X X X X X X X	pass pass pass pass pass pass pass pass
4	CONDITION OF THE PROPERTY OF T	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/77  0/77  0/77  0/77	cion parts submitted for testing  3 wafer lots  3 wafer lots  3 wafer lots	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass
4	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC1	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max Tj, PER JESD22A-104	3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  168 Cycles  500 Cycles	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/77  0/77  0/77  0/77	as wafer lots  3 Assembly lots	x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass  pass  pass  pass  pass  pass  pass  pass  pass  pass  pass  pass  pass	X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass
4	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV) FORWARD SURGE  HTRB  TC¹  PCT/AC	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22-A102  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-	3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles  96 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77	lion parts submitted for testing  3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots	x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass
4	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC1	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-1406	3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  168 Cycles  500 Cycles	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/77  0/77  0/77  0/77	as wafer lots  3 Assembly lots	x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass  pass  pass  pass  pass  pass  pass pass pass pass pass pass pass pass
4	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC¹  PCT/AC  HAST	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-A102  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22A-A110	3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  168 Cycles  500 Cycles  1000 Cycles  96 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77	lion parts submitted for testing  3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots	x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass
4	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV) FORWARD SURGE  HTRB  TC¹  PCT/AC	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 159FIG 100%RH; PER JESD22-A102  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110  Ta=85°C, 85% RH, with 80% Maximum Reverse	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET 168 Hrs 500 Hrs 1000 Cycles 1000 Cycles 1000 Cycles 96 Hrs  168 Hrs 500 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77  0/77	3 wafer lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	Pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X	Pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass
5 7 8 9	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC¹  PCT/AC  HAST	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-A102  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22A-A110	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 1000 Cycles 1000 Cycles 96 Hrs 168 Cycles 96 Hrs 168 Hrs 500 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77	3 wafer lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass   pass	x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X	Pass   Pa	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
3 ( 4 5 7 8 9 9 alt	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC¹  PCT/AC  HAST  H3TRB	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101	168Hrs 3 cycles  PER SPEC  Operating Range, PER DATA SHEET 168 Hrs 500 Hrs 1000 Cycles 1000 Cycles 96 Hrs  96 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	Pass pass pass pass pass pass pass pass	x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	x x x x x x x x	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X	Pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	Pass pass pass pass pass pass pass pass
5 7 8 9	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC¹  PCT/AC  HAST	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max Tj, PER JESD22A-104  Ta=121°C 159FIG 100%RH; PER JESD22-A102  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110  Ta=85°C, 85% RH, with 80% Maximum Reverse	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 1000 Cycles 1000 Cycles 96 Hrs 168 Cycles 96 Hrs 168 Hrs 500 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	Pass pass pass pass pass pass pass pass	x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X	Pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
3 (4 5 7 8 9 9 alt 9 alt	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV) FORWARD SURGE  HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-101  Ta=85°C, 85% RH, with 80% Maximum Reverse Blas, JESD22A-101  Ta=85°C, 85% RH,	JEBHRS  3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Cycles  1000 Cycles  96 Hrs  96 Hrs  168 Hrs  500 Hrs  168 Hrs  500 Hrs  168 Hrs  500 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77	3 wafer lots 3 Assembly lots 3 wafer lots	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	Pass pass pass pass pass pass pass pass	x	pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X	Pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	Pass pass pass pass pass pass pass pass
3 ( 4 5 7 8 9 9 alt	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC¹  PCT/AC  HAST  H3TRB	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET 168 Hrs 1000 Hrs 1000 Hrs 1000 Cycles 1000 Cycles 1000 Cycles 96 Hrs  168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 1700 Hrs 188 Hrs 188 Hrs 199	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77	3 wafer lots 3 Assembly lots 3 wafer lots	x x x x x x x x x x x x x x x x x x x	pass   pass	x x x x x x x x x x x x x x x x x x x	pass   pass	X X X X X X X X X X X X X X X X X X X	pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass   Pa	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass
3 (4 5 7 8 9 9 alt 9 alt	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV) FORWARD SURGE  HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22A-110  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 1000 Cycles 1000 Cycles 1000 Cycles 1000 Hrs 168 Hrs 500 Hrs 1000 Cycles 11000 Cycles	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass
3 (4 4 5 7 8 9 9 alt 10	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=130C, 85%RH 33.3 psia 80% Blas; PER JESD22A-101  Ta=85°C, 85% RH, with 80% Maximum Reverse Blas JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 1000 Cycles 1000 Cycles 96 Hrs  168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 169 Hrs 168 Hrs 500 Hrs 1700 Hrs 188 Hrs 189 Hrs 1900 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificat:  0/25  0/45  0/77	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 1 wafer lots	x x x x x x x x x x x x x x x x x x x	pass   pass	x x x x x x x x x x x x x x x x x x x	pass   pass	X X X X X X X X X X X X X X X X X X X	pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass	X X X X X X X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass
3 ( 4 5 7 8 9 9 alt 9 alt	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV) FORWARD SURGE  HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH, PER JESD22A-A102  Ta=130C, 85%RH, 33.3 psia 80% Bias; PER JESD22-A102  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q100-005)	JEBHYS  3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  JEB HYS  500 HYS  168 Cycles  1000 Cycles  96 HYS  96 HYS  168 HYS  500 HYS  168 HYS  500 HYS  168 HYS  500 HYS  168 HYS  500 HYS  169 HYS  169 HYS  1700 HYS  180 HYS  1	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualification  0/25  0/45  0/77	a wafer lots  3 Assembly lots  3 Assembly lots  3 wafer lots  3 wafer lots  3 wafer lots  3 wafer lots  1 wafer lots  1 wafer lot  1 wafer lot	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass   Pa	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass
5 7 8 9 9 alt 10	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV) FORWARD SURGE  HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL  ESD	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=130C, 85%RH 33.3 psia 80% Blas; PER JESD22A-101  Ta=85°C, 85% RH, with 80% Maximum Reverse Blas JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 1000 Cycles 1000 Cycles 96 Hrs  168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 169 Hrs 168 Hrs 500 Hrs 1700 Hrs 188 Hrs 189 Hrs 1900 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualification  0/25  0/45  0/77	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 1 wafer lots	X  X  X  X  X  X  X  X  X  X  X  X  X	pass   pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass	X X X X X X X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass
3 (4 4 5 5 7 8 8 9 9 alt 10 11 11 12 12 1	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV) FORWARD SURGE  HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL  ESD	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q101-001)  CDM (AEC-Q101-002)  AEC Q101-004 SEC. 4	JESHYS  3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  1000 Cycles  96 Hrs  168 Hrs  500 Hrs  168 Hrs  500 Hrs  1000 Hrs  168 Hrs  500 Hrs  1000 H	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualification  0/25  0/45  0/77  0/70	3 wafer lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 1 wafer lots 1 wafer lot	X  X  X  X  X  X  X  X  X  X  X  X  X	pass   pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass	X X X X X X X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass	X X X X X X X X X X X X X X X X X X X	pass   pass
5 7 8 9 9 alt 10 11	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL  ESD  DPA	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=30C, 85%RH 33.3 psia 80% Bias; PER JESD22A-101  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q101-001)  CDM (AEC-Q101-002)  MM (AEC-Q101-002)	JEBHYS  3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  JEB HYS  500 HYS  168 Cycles  1000 Cycles  96 HYS  96 HYS  168 HYS  500 HYS  168 HYS  500 HYS  168 HYS  500 HYS  168 HYS  500 HYS  169 HYS  169 HYS  1700 HYS  180 HYS  1	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualification of the state of t	3 wafer lots 3 Assembly lots 3 wafer lots 1 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass   pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass	X X X X X X X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass   Pa	X X X X X X X X X X X X X X X X X X X	pass   pass
3 (4 4 5 5 7 8 8 9 9 alt 10 11 12 12 12 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV) FORWARD SURGE  HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL  ESD  DPA  Package Physical Dimemsions (PD)	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A102  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q101-002)  AEC Q101-004 SEC. 4  JESD22-B100	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET 168 Hrs 500 Hrs 1000 Cycles 1000 Cycles 96 Hrs  96 Hrs  168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs 158 Hrs 500 Hrs 1000 Hrs 158 Hrs 500 Hrs 169 Hrs 178 Hrs 189 Hrs 189 Hrs 189 Hrs 199 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/70  0	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 1 wafer lots 1 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass   pass
3 (4 4 5 5 7 7 8 8 9 9 alt 10 11 12 13 3 9 9	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL  ESD  DPA Package Physical Dimensions (PD)  RESISTANCE TO	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q101-001)  CDM (AEC-Q101-002)  AEC Q101-004 SEC. 4	JESHYS  3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET  168 Hrs  500 Hrs  1000 Hrs  1000 Cycles  96 Hrs  168 Hrs  500 Hrs  168 Hrs  500 Hrs  1000 Hrs  168 Hrs  500 Hrs  1000 H	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualification  0/25  0/45  0/77  0/70	3 wafer lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 1 wafer lots 1 wafer lot	X  X  X  X  X  X  X  X  X  X  X  X  X	pass   pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass	X X X X X X X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
3 (4 4 5 7 7 8 8 9 9 alt 10 11 12 13 20 1	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL  ESD  DPA Package Physical Dimensions (PD)  RESISTANCE TO SOLDER HEAT (RSH)	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22A-110  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-0101-001)  CDM (AEC-0101-002)  AEC 0101-004 SEC. 4  JESD22-B100  JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 1000 Cycles 1000 Cycles 1000 Cycles 1000 Cycles 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 169 Hrs 1700 Hrs 189 Hrs 189 Hrs 189 Hrs 190 Hrs 1	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/73  0/73  0/30  0/30  0/30  0/30	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 1 wafer lots 1 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 Assembly lot 1 Assembly lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	x x x x x x x x x x x x x x x x x x x	pass   pass	X X X X X X X X X X X X X X X X X X X	pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass   Pa	X  X  X  X  X  X  X  X  X  X  X  X  X	pass   pass
3 (4 4 5 5 7 7 8 8 9 9 alt 10 11 12 13 20 12 1	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL  ESD  DPA Package Physical Dimemsions (PD) SOIDER HEAT (RSH) SOIDER HEAT (RSH) SOIDER HEAT (RSH)	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=-65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSiG 100%RH; PER JESD22A-104  Ta=121°C 15PSiG 100%RH; PER JESD22A-101  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q101-002)  AEC Q101-004 SEC. 4  JESD22-B100  JESD22 A-111 (SMD), 8-106 (PTH) (260C @30S)  J-STD-002; JESD22B102 (245C +0/5S)	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet  168 Hrs 500 Hrs 1000 Hrs 1000 Cycles 1000 Cycles 96 Hrs  96 Hrs  168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 169 Hrs 160 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualification  0/25  0/45  0/77  0/70	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 1 wafer lots 1 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 Assembly lot 1 Assembly lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass   pass
3 (4 5 7 7 8 8 9 9 alt 10 11 12 13 20 6	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL  ESD  DPA  Package Physical plimensions (PD)  RESISTANCE TO SOLDER HEAT (RSH) SOIDER HEAT (RSH) SOIDER HEAT (RSH)	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22A-110  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-0101-001)  CDM (AEC-0101-002)  AEC 0101-004 SEC. 4  JESD22-B100  JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET 168 Hrs 1000 Hrs 1000 Hrs 1000 Cycles 1000 Cycles 1000 Cycles 1000 Cycles 1000 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 1700 Hrs 188 Hrs 189 Hrs 1900 Cycles 19	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/73  0/73  0/30  0/30  0/30  0/30	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 1 wafer lots 1 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 Assembly lot 1 Assembly lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	x x x x x x x x x x x x x x x x x x x	pass   pass	X X X X X X X X X X X X X X X X X X X	pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass   Pa	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass
3 (4 5 7 7 8 8 9 9 alt 10 11 11 12 13 20 12 22 1	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL  ESD  DPA Package Physical Dimensions (PD)  RESISTANCE TO SOLDER HEAT (RSH) SOIderability THERMAL RESISTANCE (TR)	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=30C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q100-005)  MM (AEC-Q101-002)  AEC Q101-004 SEC. 4  JESD22-B100  JESD22-B-111 (SMD), B-106 (PTH) (260C @305)  J-STD-002; JESD22B102 (245C +0/55)  JESD 24-3, 24-4, 24-6 AS APPROPRIATE	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet  168 Hrs 168 Hrs 1000 Hrs 1000 Hrs 1000 Cycles 1000 Cycles 1000 Cycles 1000 Cycles 1000 Cycles 1000 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 169 Hrs 169 Hrs 169 Hrs 169 Hrs 1700 Hrs 180 Hrs 180 Hrs 180 Hrs 180 Hrs 180 Hrs 190 Cycles 190 Cyc	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificat:  0/25  0/45  0/77  0/70  0/77  0/70  0	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 1 wafer lots 1 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass   pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass  pass	X X X X X X X X X X X X X X X X X X X	Pass	x x x x x x x x x x x x x x x x x x x	pass pass pass  pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass   pass
9 alt 10 11 12 13 20 22 23	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL  ESD  DPA Package Physical Dimensions (PD)  RESISTANCE TO SOLDER HEAT (RSH) Solderability THERMAL RESISTANCE (TR) Wire Bond Strength	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22A-110  Ta=859C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=859C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q100-005)  MM (AEC-Q101-002)  AEC Q101-004 SEC. 4  JESD22-B100  JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)  J-STD-002; JESD22B102 (245C +0/5S)  JESD 24-3, 24-4, 24-6 AS APPROPRIATE  MIL-STD-750 METHOD 2037 (JESD22-B116B)	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 1000 Cycles 1000 Cycles 96 Hrs  96 Hrs  168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 169 Hrs 169 Hrs 1000 Hrs 169 Hrs 1000 Hrs 169 Hrs 1000 Hrs 169 Hrs 1000 Hrs 169 Hrs 500 Hrs 1000 Hrs 169 Hrs 500 Hrs 1000 Hrs 169 Hrs 500 Hrs 1000 Hrs 500 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificati  0/25  0/45  0/77  0/70  0/30  0/30  0/30  0/30  0/10  0/10  0/10  0/10  0/ min of 5	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 4 wafer lots 1 wafer lots 1 wafer lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass  pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass s pass pass pass pass pass pass pa	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass   Pass
9 alt 10 11 12 13 20 21 22 23 24	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL  ESD  DPA Package Physical Dimensions (PD) RESISTANCE TO SOLDER HEAT (RSH) Solderability THERMAL RESISTANCE (TR) Wire Bond Strength BOND SHEAR	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=30C, 85%RH 33.3 psia 80% Bias; PER JESD22A-110  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q101-002)  AEC Q101-004 SEC. 4  JESD22-B100  JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)  J-STD-002; JESD22B102 (245C +0/5S)  JESD 24-3, 24-4, 24-6 AS APPROPRIATE  MIL-STD-750 METHOD 2037 (JESD22-B116B)  AEC-Q101-003	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet PER DATA SHEET 168 Hrs 1000 Hrs 1000 Hrs 1000 Cycles 1000 Cycles 1000 Cycles 1000 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 169 Hrs 169 Hrs 169 Hrs 169 Hrs 169 Hrs 160 Hrs 1000 Hrs 160 Hrs 1000 Hrs 160 Hrs 1000 Hrs 1500 Cycles PER DATA SHEET PER DATA SHEET PER DATA SHEET PER DATA SHEET PER SPEC 5 Seconds PER SPEC Cycles 5 Seconds PER SPEC Cycles 5 Seconds	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificat:  0/25  0/45  0/77  0/70  0	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 4 wafer lots 1 wafer lots 1 wafer lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass   pass	X X X X X X X X X X X X X X X X X X X	pass  pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass	X X X X X X X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass           pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass
3 (4 4 5 5 7 7 8 8 9 9 alt 10 11 12 13 20 21 22 23	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV)  FORWARD SURGE  HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL  ESD  DPA Package Physical Dimemsions (PD)  RESISTANCE TO SOLDER HEAT (RSH) Solderability THERMINL RESISTANCE (TR) Wire Bond Strength BOND SHEAR Die Shear	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22A-1102  Ta=130C, 85%RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q101-001)  CDM (AEC-Q101-002)  AEC Q101-004 SEC. 4  JESD22-B100  JESD22-B110 (245C +0/55)  JESD 24-3, 24-4, 24-6 AS APPROPRIATE  MIL-STD-750 METHOD 2037 (JESD22-B116B)  AEC-Q101-003  MIL-STD-750 METHOD 2037 (JESD22-B116B)  AEC-Q101-003  MIL-STD-750 Z017	168Hrs 3 cycles  PER SPEC  Operating Range, Per Data Sheet  PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 1000 Cycles 1000 Cycles 96 Hrs  96 Hrs  168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 169 Hrs 169 Hrs 1000 Hrs 169 Hrs 1000 Hrs 169 Hrs 1000 Hrs 169 Hrs 1000 Hrs 169 Hrs 500 Hrs 1000 Hrs 169 Hrs 500 Hrs 1000 Hrs 169 Hrs 500 Hrs 1000 Hrs 500 Hrs	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualification  0/25  0/45  0/77  0/70  0/70  0/70  0/70  0/70  0/70  0/70  0/30  0/30  0/30  0/30  0/30  0/30  0/10  0/10  0/10  0/10  0/10	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 4 wafer lots 1 wafer lots 1 wafer lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	x x x x x x x x x x x x x x x x x x x	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X X X X X X X X X X X X X X X X X X X	pass  pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	x x x x x x x x x x x x x x x x x x x	pass s pass pass pass pass pass pass pa	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass
3 (4 4 5 7 7 8 8 9 9 alt 10 11 12 13 20 12 22 23 24 4	CONDITIONING  EXTERNAL VISUAL EV)  PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB  TC¹  PCT/AC  HAST  H3TRB  HHT  IOL  ESD  DPA Package Physical Dimensions (PD) RESISTANCE TO SOLDER HEAT (RSH) Solderability THERMAL RESISTANCE (TR) Wire Bond Strength BOND SHEAR	Soak 85C, 85% RH  IR reflow 260C  MIL-STD-750 METHOD 2071  -55C, 25C, 85C, 125C, 150C  MIL-750D, METHOD 4066  Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1  Ta=65C to 150C or Max TJ, PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=121°C 15PSIG 100%RH; PER JESD22A-104  Ta=30C, 85%RH 33.3 psia 80% Bias; PER JESD22A-110  Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101  Ta=85°C, 85% RH,  MIL-STD-750 Method 1037 (N/A for TVS)  HBM (AEC-Q101-001)  CDM (AEC-Q101-002)  AEC Q101-004 SEC. 4  JESD22-B100  JESD22 A-111 (SMD), B-106 (PTH) (260C @30S)  J-STD-002; JESD22B102 (245C +0/5S)  JESD 24-3, 24-4, 24-6 AS APPROPRIATE  MIL-STD-750 METHOD 2037 (JESD22-B116B)  AEC-Q101-003	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet PER DATA SHEET 168 Hrs 1000 Hrs 1000 Hrs 1000 Cycles 1000 Cycles 1000 Cycles 1000 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 169 Hrs 169 Hrs 169 Hrs 169 Hrs 169 Hrs 160 Hrs 1000 Hrs 160 Hrs 1000 Hrs 160 Hrs 1000 Hrs 1500 Cycles PER DATA SHEET PER DATA SHEET PER DATA SHEET PER DATA SHEET PER SPEC 5 Seconds PER SPEC Cycles 5 Seconds PER SPEC Cycles 5 Seconds	Size per Lot  SMD only, for Test #7, 8, 9 & 10  All qualificat:  0/25  0/45  0/77  0/70  0	3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 4 wafer lots 1 wafer lots 1 wafer lot 1 Assembly lot	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass Pass Pass Pass Pass Pass Pass Pass	x x x x x x x x x x x x x x x x x x x	pass   pass	X X X X X X X X X X X X X X X X X X X	pass  pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass	X X X X X X X X X X X X X X X X X X X	pass	x x x x x x x x x x x x x x x x x x x	pass           pass	x x x x x x x x x x x x x x x x x x x	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass pass pass pass pass pass pass pass	X  X  X  X  X  X  X  X  X  X  X  X  X	Pass

Submitted By: Shane 2016-2-15 Approved By: