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LFPCNUSA2022-001

Product Change Notification for Littelfuse MOSFET DISCRETE and Discrete IGBT in TO-220 package, change of manufacturing location

To whom it may concern,

Littelfuse would like to notify you of a change related to the TO-220 package

DESCRIPTION OF CHANGE: As a part of Littelfuse endeavors to improve the manufacturing footprint, it has been decided to introduce a new TO-220 backend manufacturing site for the affected part numbers listed below. With this additional capacity to support the upcoming customer demands. Country of origin to change from Korea to China.

Form, fit, function changes: No change in the silicon dice used. We would like to notify you on the differences seen with this change:

1. POD – Package Outline Dimension
2. Package Marking
3. Tube/Reel/Inner Box Label Marking
4. Inner Box Package
5. Tube Package
6. Bill of Material

Details can be seen in **APPENDIX A**.

Please refer to next page for the list of affected part numbers.

REMARKS: List of affected part numbers:

MOSFET DISCRETE and Discrete IGBT in TO-220 package, change of manufacturing location

Part Number	Product series	Part Number	Product series
IXGP48N60A3	IGBT	IXYP60N65A5	IGBT
IXGP36N60A3	IGBT	IXYP10N65C3D1	IGBT
IXYP20N65C3D1	IGBT	IXFP110N15T2	MOSFET

If you have any additional questions or concerns, please contact me or your Regional Sales Manager.

Best Regards,

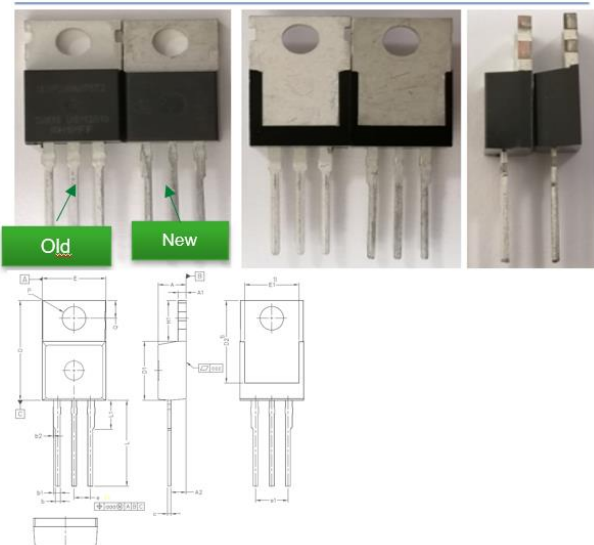
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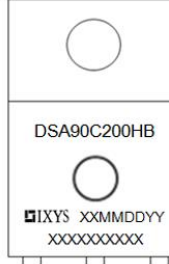

APPENDIX A:

1. POD – Package Outline Dimension


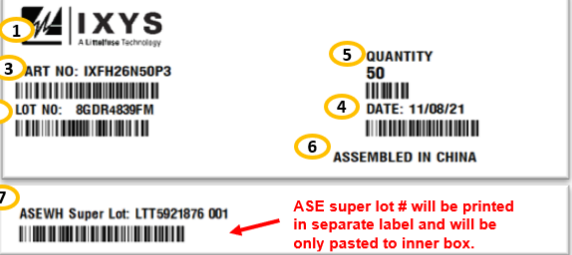
TO-220 POD				
SYM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.165	0.185	4.20	4.70
A ₁	0.047	0.055	1.20	1.40
A ₂	0.079	0.106	2.00	2.70
b	0.024	0.039	0.60	1.00
b ₂	0.037	0.057	0.95	1.45
c	0.014	0.026	0.35	0.65
D	0.587	0.628	14.90	15.95
D ₁	0.335	0.372	8.50	9.45
D ₂	0.482	0.537	12.25	13.65
E	0.382	0.406	9.70	10.30
E ₁	0.283	0.354	7.20	9.00
e	0.100BSC		2.54BSC	
e ₁	0.200BSC		5.08BSC	
H ₁	0.244	0.268	6.20	6.80
L	0.492	0.551	12.50	14.00
L ₁	0.110	0.187	2.80	4.75
P	0.134	0.152	3.40	3.85
Q	0.102	0.126	2.60	3.20



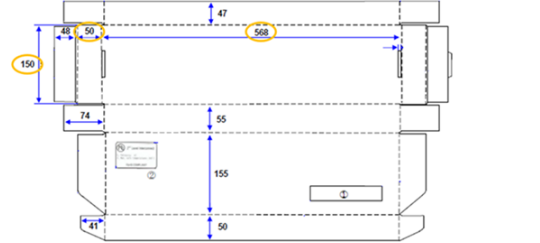
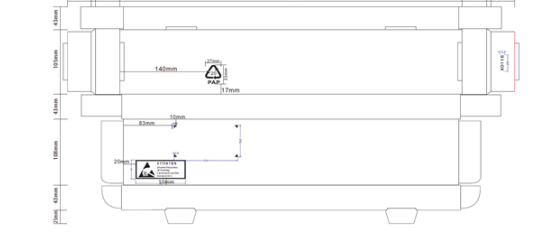
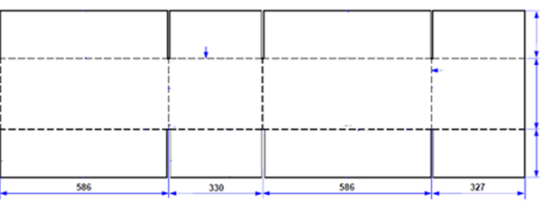
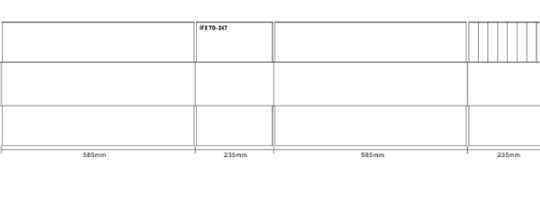
2. Package Marking

Old		PKG	TO-220X	
		Marking line 1	Product Name(Center Alignment)	
		Marking line 2	IXYS Logo + Date Code & Plant Code(YYWWS)	
		Marking line 3	IXYS Assembly lot No. (6 digit Fkt.No.) (Center Alignment)	
New		PKG	TO-220X	
		Marking line 1	Device part number, better no more than 11ea characters	
		Marking line 2	LT logo & IXYS logo IXYS logo need bold font there is no vertical line between logo	
		Marking line 3	IXYS wafer lot No. (6 digit Fkt.No.) (Center Alignment)	

3. Tube/Reel/Inner Box Label Marking

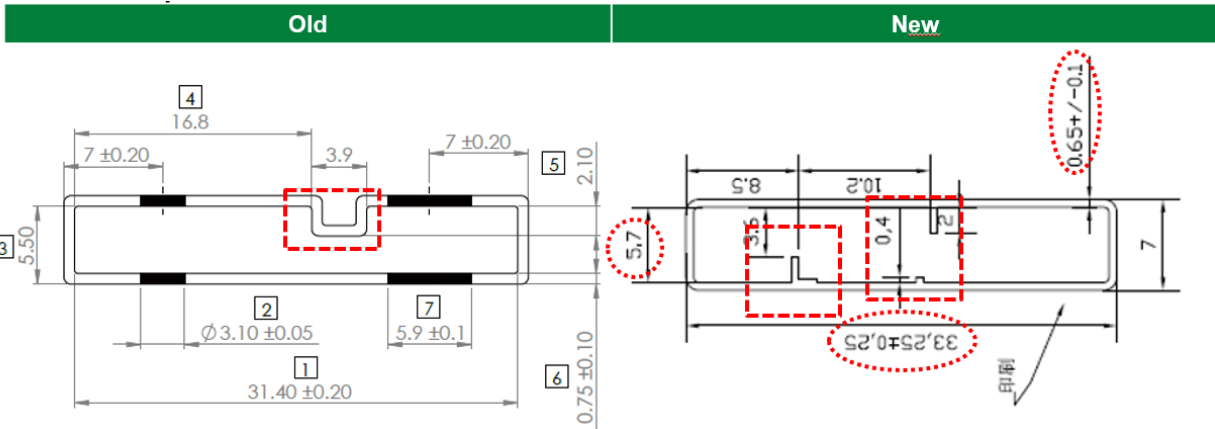
Old	New
 <ol style="list-style-type: none"> 1. Littelfuse+IXYS logo. 2. LOT NO: Wafer Lot No+Barcode 3. PART NO: PART NO+Barcode 4. DATE CODE: DATE:MMDDYY+Barcode 5. QTY: Total unit Qty of each Tueb/Reel/Box+Barcode 6. Test fixed "ASSEMBLED IN Korea". 	 <ol style="list-style-type: none"> 1. Littelfuse+IXYS logo. 2. LOT NO: Wafer Lot No+Barcode 3. PART NO: PART NO+Barcode 4. DATE CODE: DATE:MMDDYY+Barcode 5. QTY: Total unit Qty of each Tueb/Reel/Box+Barcode 6. Test fixed "ASSEMBLED IN CHINA". 7. ASE Super Lot: ASE special trace code (separate label) <p style="color: red; font-size: small;">ASE super lot # will be printed in separate label and will be only pasted to inner box.</p>

4. Inner Box Package

Old	New
	
Outer Box	Outer BOX
	

5. Tube Package

Item	Description	Old	New
1	Size of Inner Box	568*150*50mm	565*109*43mm
2	Size of Outer box	586*230*167mm	585*235*130mm
3	Size of Tube	532*31.4mm	524*33.25mm
4	Packing Qty per Tube	50pcs	50pcs
5	Packing Qty per Inner Box	1000pcs	500pcs
6	Packing Qty per Outer Box	8000pcs	2500pcs



6. Bill of Material

		OLD	NEW	Change Y/N
		Subcontractor Korea	Subcontractor China	YES
TO-220	Leadframe	Bare Cu	T-post Ni	YES
	Solder Wire	Leaded Solder	Leadfree Solder	YES
	Mold compound	Non-Green EMC	Green EMC	YES