



Expertise Applied | Answers Delivered

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Jan 31st, 2025

Dear Valued Customer

This is a notification letter to inform you that we are improving our Moisture Sensitivity Level (MSL) to MSL 1 for various IXYS Brand Thyristor & Diode Discrete surface mount packages.

Package types includes: TO-263(D2PAK), TO-268(D3PAK)

All affected IXYS Brand Thyristors & Diode Discrete surface mount products have been fully qualified following established performance and reliability criteria using alternative EMC (PCN # ESW490-58). Below and succeeding pages summarize the reliability result and change in the packing method.

Please, refer to the attached product list in the last pages for detailed affected product coverage.

- Form, fit, function changes** : Updated MSL 1 packing method
- Effective date** : Feb 28th, 2025
- Replacement products** : N/A
- Last time buy** : N/A

Reliability Test Result – Moisture Sensitivity Level (MSL)

PACKAGE	DEVICE	REL-TEST	CONDITIONS	SAMPLE SIZE PER LOT	STATUS	RESULT
TO-268	CLA100E1200TZ DLA100IM1200TZ IXG100I800ATZ	TC	100 cycles. -40/+150°C	20	Finished	Completed: Passed reliability
		HTRB	1000hrs	20	Finished	Completed: Passed reliability
		H3TRB	1000hrs, 85°C, 85%r.H.	20	Finished	Completed: Passed reliability
		uHAST	96hrs, 130°C, 85%r.H.	20	Finished	Completed: Passed reliability
		MSL1	168hrs, 85°C, 85%r.H.	11	Finished	Completed: Passed reliability
		MSL3	192hrs, 30°C, 60%r.H.	11	Finished	Completed: Passed reliability
TO-263	DMA30IM1600PZ IXA20I1200PZ	TC	100 cycles. -40/+150°C	20	Finished	Completed: Passed reliability
		HTRB	1000hrs	20	Finished	Completed: Passed reliability
		H3TRB	1000hrs, 85°C, 85%r.H.	20	Finished	Completed: Passed reliability
		uHAST	96hrs, 130°C, 85%r.H.	20	Finished	Completed: Passed reliability
		MSL1	168hrs, 85°C, 85%r.H.	11	Finished	Completed: Passed reliability
		MSL3	192hrs, 30°C, 60%r.H.	11	Finished	Completed: Passed reliability

Packing Method

PACKAGE	MSL 3	MSL 1
TO-263	Moisture barrier bag AMBB desiccant HIC card	Moisture barrier bag/ ESD shielding bag AMBB desiccant 2 reels/ box (optional)
TO-268	Moisture barrier bag AMBB desiccant HIC card	Moisture barrier bag/ ESD shielding bag AMBB desiccant 2 reels/ box (optional)

Your Littelfuse representative is available to discuss more specific details with you or answer any questions you may have. Thank you for your understanding and cooperation!

Yours sincerely,

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Appendix A: Detail Part Number list affected

ELEC Family	Package Type	Part Number
POWER THYRISTOR DISCRETE	TO-263	CLA15E1200NPZ-TRL
POWER THYRISTOR DISCRETE	TO-263	CLA15E1200NPZ-TUB
POWER THYRISTOR DISCRETE	TO-263	CLA20EF1200PZ-TRL
POWER THYRISTOR DISCRETE	TO-263	CLA20EF1200PZ-TUB
POWER THYRISTOR DISCRETE	TO-263	CLA30E1200NPZ-TRL
POWER THYRISTOR DISCRETE	TO-263	CLA30E1200NPZ-TUB
POWER THYRISTOR DISCRETE	TO-263	CLA30E1200PC-TRL
POWER THYRISTOR DISCRETE	TO-263	CLA30E1200PC-TUB
POWER THYRISTOR DISCRETE	TO-263	CLA30MT1200NPZ-TRL
POWER THYRISTOR DISCRETE	TO-263	CLA30MT1200NPZ-TUB
POWER THYRISTOR DISCRETE	TO-263	CLA40E1200NPZ-TRL
POWER THYRISTOR DISCRETE	TO-263	CLA40E1200NPZ-TUB
POWER THYRISTOR DISCRETE	TO-263	CLA40MT1200NPZ-TUB
POWER THYRISTOR DISCRETE	TO-263	CLA5E1200PZ-TUB
POWER THYRISTOR DISCRETE	TO-263	CLB30I1200PZ-TRL
POWER THYRISTOR DISCRETE	TO-263	CLB30I1200PZ-TUB
POWER THYRISTOR DISCRETE	TO-263	CLB40I1200PZ-TRL
POWER THYRISTOR DISCRETE	TO-263	CLB40I1200PZ-TUB
POWER THYRISTOR DISCRETE	TO-263	CLE20E1200PC-TRL
POWER THYRISTOR DISCRETE	TO-263	CLE20E1200PC-TUB
POWER THYRISTOR DISCRETE	TO-263	CMA20E1600PZ-TRL
POWER THYRISTOR DISCRETE	TO-263	CMA20E1600PZ-TUB
POWER THYRISTOR DISCRETE	TO-263	CMA30E1600PZ-TRL
POWER THYRISTOR DISCRETE	TO-263	CMA30E1600PZ-TUB
POWER THYRISTOR DISCRETE	TO-263	CME30E1600PZ-TRL
POWER THYRISTOR DISCRETE	TO-263	CME30E1600PZ-TUB
POWER THYRISTOR DISCRETE	TO-263	CS1854-TRL
POWER THYRISTOR DISCRETE	TO-263	CS1854-TRL
POWER THYRISTOR DISCRETE	TO-263	CS19-08HO1S-TRL
POWER THYRISTOR DISCRETE	TO-263	CS19-08HO1S-TUB
POWER THYRISTOR DISCRETE	TO-263	CS19-12HO1S-TRL
POWER THYRISTOR DISCRETE	TO-263	CS19-12HO1S-TUB

POWER DIODE DISCRETE	TO-263	DAA10EM1800PZ-TRL
POWER DIODE DISCRETE	TO-263	DAA10EM1800PZ-TUB
POWER DIODE DISCRETE	TO-263	DAA10P1800PZ-TUB
POWER DIODE DISCRETE	TO-263	DHG30IM600PC
POWER DIODE DISCRETE	TO-263	DHG30IM600PC-TRL
POWER DIODE DISCRETE	TO-263	DHG30IM600PC-TRL
POWER DIODE DISCRETE	TO-263	DHG30IM600PC-TUB
POWER DIODE DISCRETE	TO-263	DHG30IM600PC-TUB
POWER DIODE DISCRETE	TO-263	DLA20IM800PC-TRL
POWER DIODE DISCRETE	TO-263	DLA20IM800PC-TUB
POWER DIODE DISCRETE	TO-263	DLA40IM800PC-TRL
POWER DIODE DISCRETE	TO-263	DLA40IM800PC-TUB
POWER DIODE DISCRETE	TO-263	DMA10IM1600PZ-TRL
POWER DIODE DISCRETE	TO-263	DMA10IM1600PZ-TUB
POWER DIODE DISCRETE	TO-263	DMA10P1600PZ-TRL
POWER DIODE DISCRETE	TO-263	DMA10P1600PZ-TUB
POWER DIODE DISCRETE	TO-263	DMA10P1800PZ-TUB
POWER DIODE DISCRETE	TO-263	DMA30IM1600PZ-TRL
POWER DIODE DISCRETE	TO-263	DMA30IM1600PZ-TUB
POWER DIODE DISCRETE	TO-263	DNA30E2200PZ-TRL
POWER DIODE DISCRETE	TO-263	DNA30E2200PZ-TUB
POWER DIODE DISCRETE	TO-263	DNA30EM2200PZ-TRL
POWER DIODE DISCRETE	TO-263	DNA30EM2200PZ-TUB
POWER DIODE DISCRETE	TO-263	DPG20C400PC-TRL
POWER DIODE DISCRETE	TO-263	DPG20C400PC-TUB
POWER DIODE DISCRETE	TO-263	DPG30C200PC-TRL
POWER DIODE DISCRETE	TO-263	DPG30C200PC-TUB
POWER DIODE DISCRETE	TO-263	DPG30C300PC-TRL
POWER DIODE DISCRETE	TO-263	DPG30C300PC-TUB
POWER DIODE DISCRETE	TO-263	DPG30IM300PC-TRL
POWER DIODE DISCRETE	TO-263	DPG30IM300PC-TUB
POWER DIODE DISCRETE	TO-263	DPG30IM400PC-TUB
POWER DIODE DISCRETE	TO-263	DPG60C300PC-TRL
POWER DIODE DISCRETE	TO-263	DPG60C300PC-TUB

POWER DIODE DISCRETE	TO-263	DPG60IM300PC-TRL
POWER DIODE DISCRETE	TO-263	DPG60IM300PC-TUB
POWER DIODE DISCRETE	TO-263	DSA30C45PC-TRL
POWER DIODE DISCRETE	TO-263	DSEC16-12AS-TRL
POWER DIODE DISCRETE	TO-263	DSEC16-12AS-TUB
POWER DIODE DISCRETE	TO-263	DSEI12-06AS-TRL
POWER DIODE DISCRETE	TO-263	DSEI12-06AS-TUB
POWER DIODE DISCRETE	TO-263	DSEI12-12AZ-TUB
POWER DIODE DISCRETE	TO-263	DSEI19-06AS-TRL
POWER DIODE DISCRETE	TO-263	DSEI19-06AS-TUB
POWER DIODE DISCRETE	TO-263	DSEI25-06AS-TRL
POWER DIODE DISCRETE	TO-263	DSEI25-06AS-TUB
POWER DIODE DISCRETE	TO-263	DSEI36-06AS-TRL
POWER DIODE DISCRETE	TO-263	DSEI36-06AS-TUB
POWER DIODE DISCRETE	TO-263	DSEI8-06AS-TRL
POWER DIODE DISCRETE	TO-263	DSEI8-06AS-TUB
POWER DIODE DISCRETE	TO-263	DSEP12-12AZ-TRL
POWER DIODE DISCRETE	TO-263	DSEP12-12AZ-TUB
POWER DIODE DISCRETE	TO-263	DSEP12-12BZ-TRL
POWER DIODE DISCRETE	TO-263	DSEP12-12BZ-TUB
POWER DIODE DISCRETE	TO-263	DSEP15-06AS-TRL
POWER DIODE DISCRETE	TO-263	DSEP15-06AS-TUB
POWER DIODE DISCRETE	TO-263	DSEP15-06BS-TRL
POWER DIODE DISCRETE	TO-263	DSEP15-06BS-TUB
POWER DIODE DISCRETE	TO-263	DSEP29-06AS-TRL
POWER DIODE DISCRETE	TO-263	DSEP29-06AS-TUB
POWER DIODE DISCRETE	TO-263	DSEP40-03AS-TRL
POWER DIODE DISCRETE	TO-263	DSEP40-03AS-TUB
POWER DIODE DISCRETE	TO-263	DSI30-08AS-TRL
POWER DIODE DISCRETE	TO-263	DSI30-08AS-TUB
POWER DIODE DISCRETE	TO-263	DSI30-12AS-TRL
POWER DIODE DISCRETE	TO-263	DSI30-12AS-TUB
POWER DIODE DISCRETE	TO-263	DSI30-16AS-TRL
POWER DIODE DISCRETE	TO-263	DSI30-16AS-TUB
POWER DIODE DISCRETE	TO-263	DSI30-16AS-TUB
POWER DIODE DISCRETE	TO-263	DSP8-08AS-TRL

POWER DIODE DISCRETE	TO-263	DSP8-08AS-TUB
POWER DIODE DISCRETE	TO-263	DSP8-08S-TRL
POWER DIODE DISCRETE	TO-263	DSP8-08S-TUB
POWER DIODE DISCRETE	TO-263	DSP8-12AS-TRL
POWER DIODE DISCRETE	TO-263	DSP8-12AS-TUB
POWER DIODE DISCRETE	TO-263	DSP8-12S-TRL
POWER DIODE DISCRETE	TO-263	DSP8-12S-TUB
POWER DIODE DISCRETE	TO-263	DSS10-01AS-TRL
POWER DIODE DISCRETE	TO-263	DSS16-0045AS-TRL
POWER DIODE DISCRETE	TO-263	DSS16-01AS-TRL
POWER DIODE DISCRETE	TO-263	DSSK28-006BS-TRL
POWER DIODE DISCRETE	TO-263	DSSK38-0025BS-TRL
POWER DIODE DISCRETE	TO-263	DSSK48-003BS-TRL
POWER THYRISTOR DISCRETE	TO-268	CLA50E1200TC-TRL
POWER THYRISTOR DISCRETE	TO-268	CLA50E1200TC-TRL
POWER THYRISTOR DISCRETE	TO-268	CLA50E1200TC-TUB
POWER THYRISTOR DISCRETE	TO-268	CLA50E1200TC-TUB
POWER THYRISTOR DISCRETE	TO-268	CS20-25MOT1-TUB
POWER DIODE DISCRETE	TO-268	DSEP60-06AT-TUB
POWER DIODE DISCRETE	TO-268	DSEP60-06AT-TUB
POWER DIODE DISCRETE	TO-268	DSP25-12AT-TRL
POWER DIODE DISCRETE	TO-268	DSP25-12AT-TRL
POWER DIODE DISCRETE	TO-268	DSP25-12AT-TUB
POWER DIODE DISCRETE	TO-268	DSP25-12AT-TUB
POWER DIODE DISCRETE	TO-268	DSP25-16AT-TRL
POWER DIODE DISCRETE	TO-268	DSP25-16AT-TRL
POWER DIODE DISCRETE	TO-268	DSP25-16AT-TUB
POWER DIODE DISCRETE	TO-268	DSP25-16AT-TUB
POWER THYRISTOR DISCRETE	TO-268 (HV)	CLA100E1200TZ-TUB
POWER THYRISTOR DISCRETE	TO-268 (HV)	CLA60MT1200NTZ-TRL
POWER THYRISTOR DISCRETE	TO-268 (HV)	CLA60MT1200NTZ-TUB
POWER THYRISTOR DISCRETE	TO-268 (HV)	CMA50E1600TZ-TRL
POWER THYRISTOR DISCRETE	TO-268 (HV)	CMA50E1600TZ-TUB
POWER THYRISTOR DISCRETE	TO-268 (HV)	CNE60E2200TZ-TUB
POWER DIODE DISCRETE	TO-268 (HV)	DLA100IM1200TZ-TUB

POWER DIODE DISCRETE	TO-268 (HV)	DSEI120-12AZ-TUB
POWER DIODE DISCRETE	TO-268 (HV)	DSEP60-12AZ-TUB
POWER DIODE DISCRETE	TO-268 (HV)	DSEP90-12AZ-TUB
POWER DIODE DISCRETE	TO-268 (HV)	DSP45-12AZ-TRL
POWER DIODE DISCRETE	TO-268 (HV)	DSP45-12AZ-TUB

POWER DIODE DISCRETE	TO-268 (HV)	DSP45-16AZ-TUB
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