

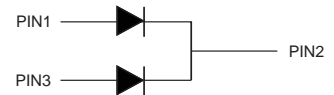
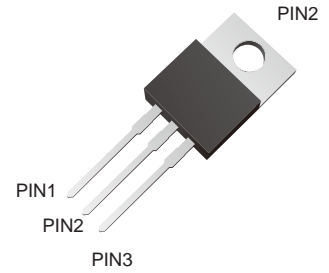
Fast Recovery Epi Diodes

Features

- High frequency operation
- High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7s, per JESD 22-B106
- Lead free in comply with EU RoHS 2011/65/EU directives

Mechanical data

- Case: TO-220AB
- Approx Weight: 1.87g (0.066oz)
- Case Material: “Green” molding compound, UL flammability classification 94V-0, “Halogen-free”.



Ordering Information

Part Number	Marking	Shipping	Packing Type
LTMU1040CD	MUR1040CD	50PCS/Tube	Tube

Maximum Ratings and Electrical Characteristics

(Ta=25°C unless otherwise noted)

Parameter	Symbol	LTMU1040CD	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	V
Maximum RMS voltage	V_{RMS}	280	V
Maximum DC blocking Voltage	V_{DC}	400	V
Maximum Average Forward Rectified Current @Tc=100°C	$I_{F(AV)}$	5 10	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50	A
Instantaneous forward voltage at 5A	V_F	1.25	V
Maximum instantaneous reverse current at rated DC blocking voltage	I_R	10 500	uA
Maximum Reverse Recovery Time (Note1)	trr	35	ns
Maximum Thermal Resistance Junction To Case	$R_{\theta JC}$	4	°C/W
Operation Junction Temperature and Storage Temperature	T_j, T_{stg}	-55 ~ +150	°C

Note: (1) Reverse recovery test conditions $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$



Characteristics Curves

Fig.1 Typical Forward Current Derating Curve

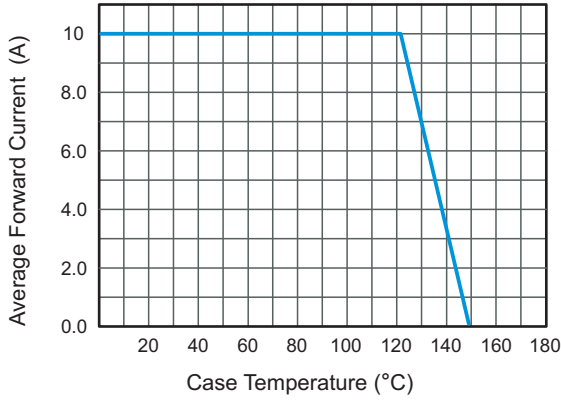


Fig.2 Typical Reverse Characteristics

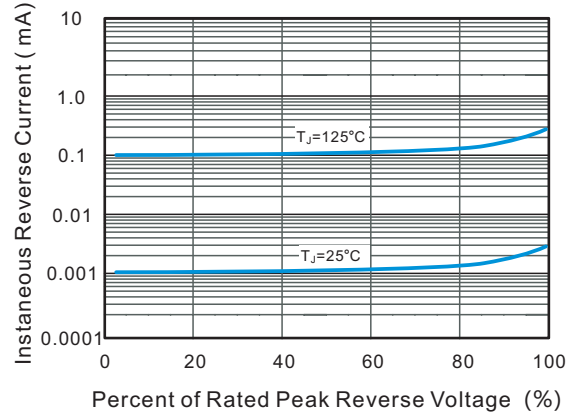


Fig.3 Typical Forward Characteristic

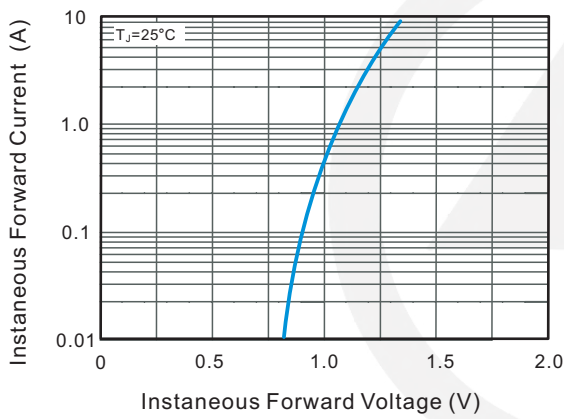
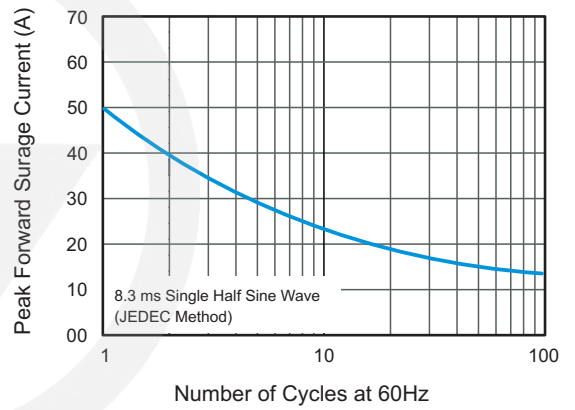
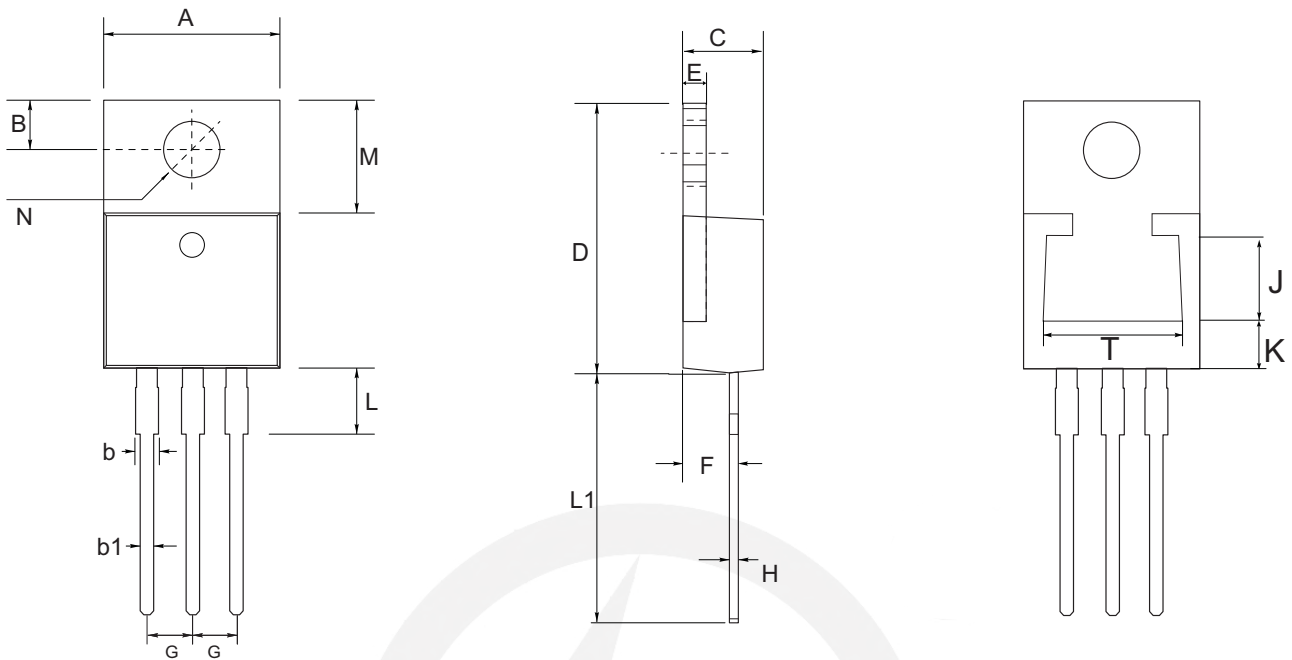


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current





TO-220AB Package Outline



Unit	A	B	b	b1	C	D	E	F	G	H	L	L1	M	N	J	T	K	
mm	max	10.45	2.94	1.77	0.94	4.76	16.0	1.40	3.37	2.54 TYPICAL	0.64	4.2	14.79	6.6 TYPICAL	3.8 TYPICAL	4.65 Typ.	7.70 Typ.	3.22 Typ.
	min	9.85	2.54	1.14	0.62	4.42	14.6	1.14	2.77		0.35	2.8	13.08					

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Version Update Information

Series NO.	Enactment/Revision Date	Effective Date	Version	Revision content	Revision Reason	Revision Person	Note
01	2024.4.15	2024.4.15	3.0	New File	/	Ding	