

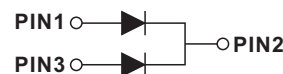
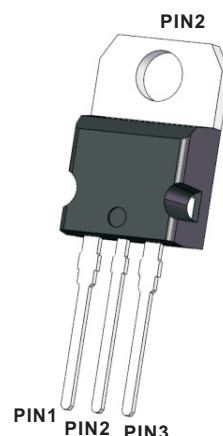


Fast Recovery Epi Diodes
Reverse Voltage - 200~600 Volts
Forward Current - 40 Amperes

TO-220-3L

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



Mechanical data

- Case: TO-220-3L
- Approx Weight: 2.04g (0.07oz)
- Lead free finish, RoHS compliant
- Case Material: “Green” molding compound, UL flammability classification 94V-0, “Halogen-free”.

Maximum Ratings And Electrical Characteristics

Ratings At 25°C Ambient Temperature Unless Otherwise Specified

Characteristics	Symble	MUR4020LCD	MUR4040LCD	MUR4060LCD	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	V
Maximum RMS voltage	V_{RMS}	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	V
Maximum Average Forward Rectified Current Per leg Per device	$I_{F(AV)}$		20 40		A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}		250		A
Max Instantaneous Forward Voltage at 20 A (Per leg)	V_F	1.0	1.3	1.7	V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 125^\circ\text{C}$	I_R		10 500		μA
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr}		35		ns
Typical Thermal Resistance	$R_{\theta JC}$		4		$^\circ\text{C/W}$
Operating Junction Temperature Range	T_j		-55 ~ +150		$^\circ\text{C}$
Storage Temperature Range	T_{stg}		-55 ~ +150		$^\circ\text{C}$

NOTE 1:Reverse recovery test conditions $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$



Fig.1 Forward Current Derating Curve

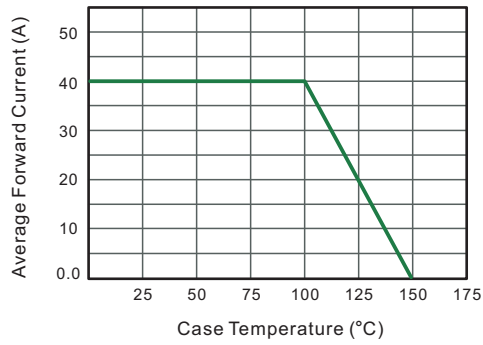


Fig.2 Typical Instantaneous Reverse Characteristics

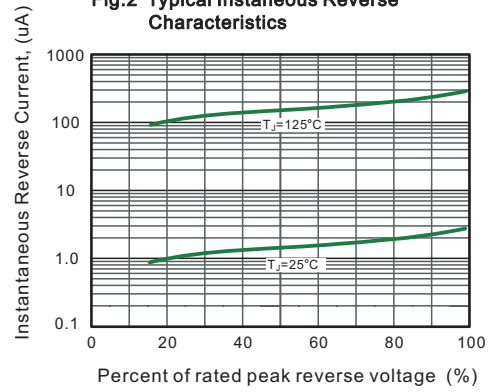


Fig.3 Typical Forward Characteristic

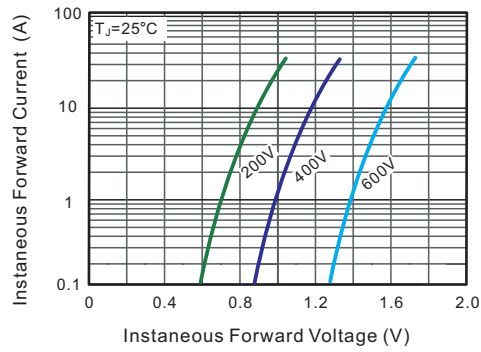
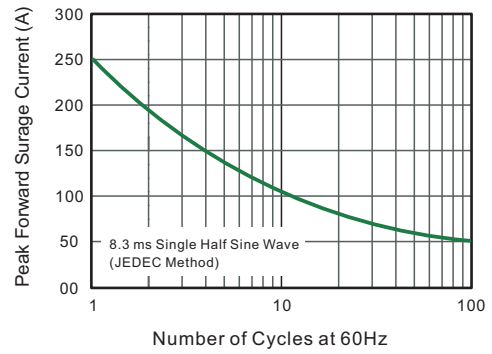


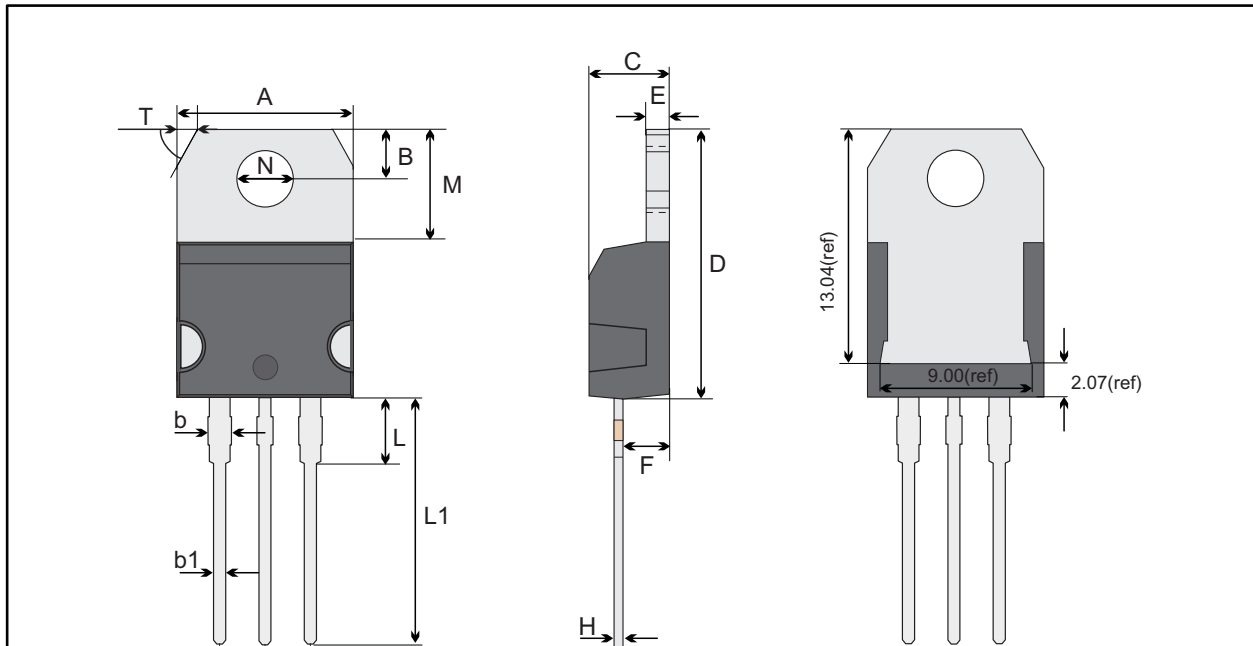
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current





Package Outline
Through Hole Package ; 3 leads

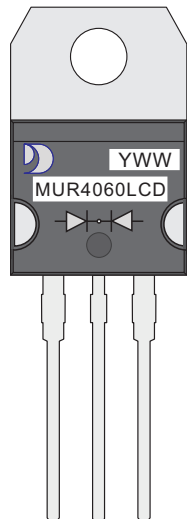
TO-220-3L



TO-220-3L mechanical data

UNIT		A	B	b	b1	C	D	E	F	G	H	L	L1	M	N	T
mm	max	10.28	2.84	1.67	0.9	4.65	15.54	1.37	2.79	2.64	0.6	3.88	13.13	6.39	3.82 typ.	1.19 58° ref.
	typ	10.18	2.74	1.47	0.8	4.45	15.34	1.27	2.59	2.54	0.5	3.68	12.93	6.19		
	min	10.08	2.64	1.27	0.7	4.25	15.14	1.17	2.39	2.44	0.4	3.48	12.73	5.99		
mil	max	405	112	66	35	183	612	54	110	104	24	153	517	252	150 typ.	47 58° ref.
	typ	401	108	58	31	175	604	50	102	100	20	145	509	244		
	min	397	104	50	28	167	596	46	94	92	16	137	501	236		

Marking Diagram



YWW: Date Code
Y: Years(0~9)
WW: Week
MUR4060LCD: Product name
(NOTE: The weekly code is based on the actual number of weeks in the calendar year.)



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