

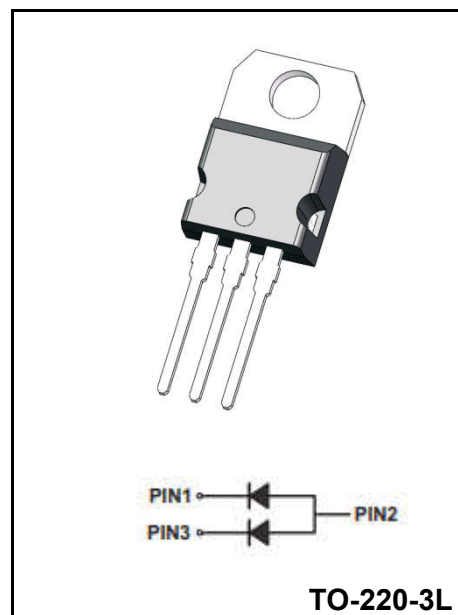
Fast Recovery Epi Diodes

Reverse Voltage – 200~600 V

Forward Current - 30 A

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 (Per Leg) At Ta=25°C Unless Otherwise Specified

Parameter		Symbols	MUR3020CTR	MUR3040CTR	MUR3060CTR	Units
Maximum Repetitive 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	I _{F(AV)}	15			A
	per device		30			
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I _{FSM}	300			A
Instantaneous forward voltage at 15A	per leg	V _F	1.0	1.3	1.6	V
Maximum instantaneous reverse current at rated DC blocking voltage	Ta=25℃ Ta=125℃	I _R	10 500			uA
Maximum Reverse Recovery Time NOTE 1		t _{rr}	35			nS
Typical Thermal Resistance		R _{θJC}	4			°C/W
Operating Junction Temperature Range		T _J	-55 ~ +150			°C
Storage Temperature Range		T _{STG}	-55 ~ +150			°C

Note1: Reverse recovery test conditions $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

Fig.1 Forward Current Derating Curve

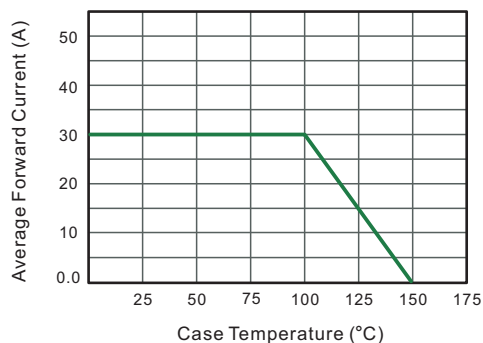


Fig.2 Typical Instantaneous Reverse Characteristics

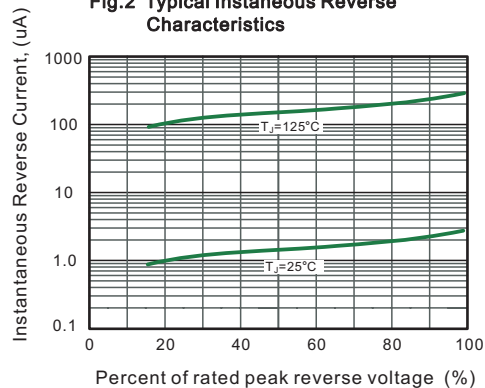


Fig.3 Typical Forward Characteristic

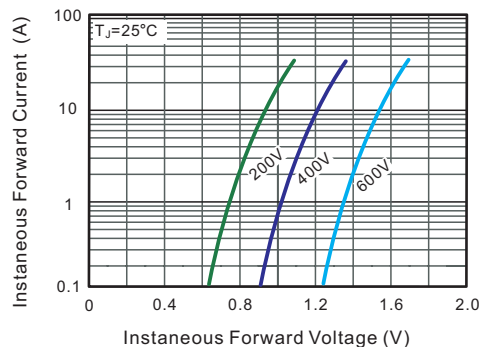
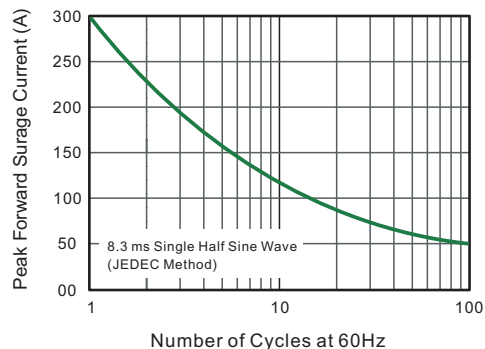
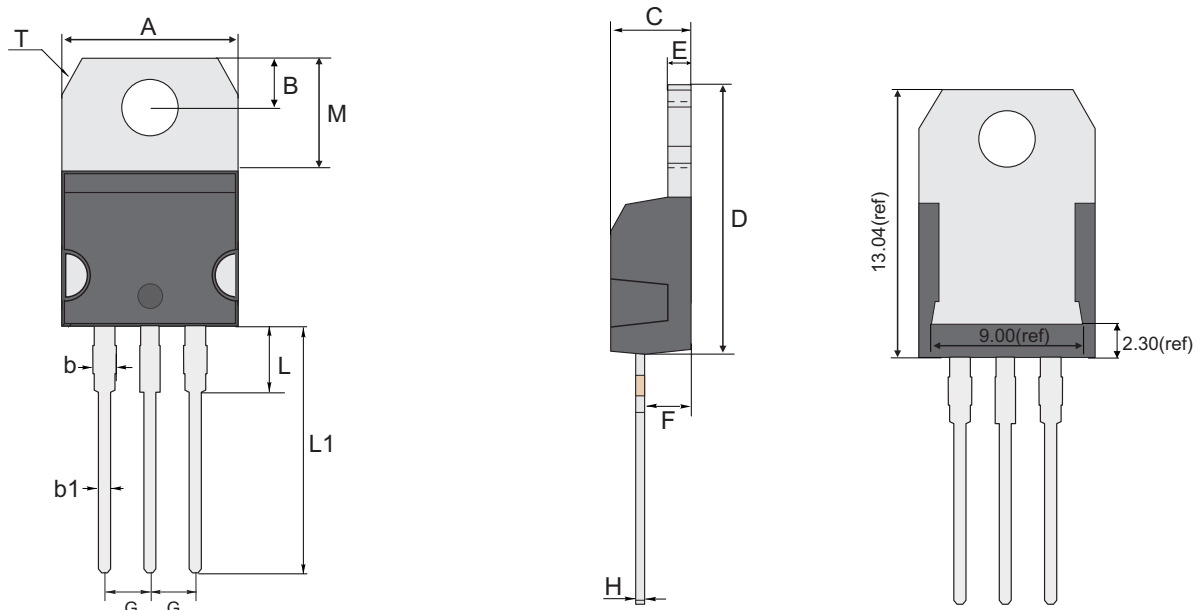


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE

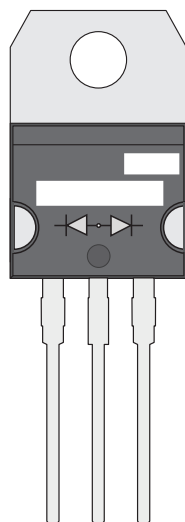
Plastic surface mounted package;3 leads



TO-220-3L

UNIT		A	B	b	b1	C	D	E	F	G	H	L	L1	M	N	T
mm	max	10.28	2.84	1.48	0.90	4.65	15.54	1.37	2.79	2.64	0.60	3.88	13.13	6.39	3.82 typ	1.19 58° typ
	typ	10.18	2.74	1.33	0.80	4.45	15.34	1.27	2.59	2.54	0.50	3.68	12.93	6.19		
	min	10.08	2.64	1.18	0.70	4.25	15.14	1.17	2.39	2.44	0.40	3.48	12.73	5.99		
mil	max	261	72	38	23	118	395	34	71	67	15	99	334	162	97 typ	30 58° typ
	typ	259	70	34	20	113	390	32	66	65	13	93	328	157		
	min	256	67	30	18	107	385	29	61	62	10	88	323	152		

MARKING DIAGRAM



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