



MGRJ90160D

90.0 AMP Glass Passivated Silicon Rectifier

1. Features

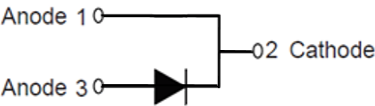
- Glass passivated chip junction.
- High current capability.
- High reliability.
- RoHS Compliant.

TO247-2L



2. Mechanical Data

- Case:Molded Plastic,TO247-2L .
- Epoxy:UL 94V-0 rate flame retardant.
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026.
- Marking:marked on body.
- Mounting Position : Any.



3. Maximum Ratings and Electrical Characteristics

Electrical Characteristics Rating at 25℃ ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	MGR90160D	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1600	V
Maximum RMS Voltage	V_{RMS}	1120	V
Maximum DC Blocking Voltage	V_{DC}	1600	V
Average Rectified Output Current @ $T_c=110^{\circ}C$	$I_{F(AV)}$	90.0	A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed @ $T_j=25^{\circ}C$ on rated load (JEDEC Method)	I_{FSM}	700	A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	2033.50	A ² s
Maximum Instantaneous Forward Voltage @ $I_F=90A$	V_{FM}	1.2	V
Maximum DC reverse current @ $T_j=25^{\circ}C$ at rated DC blocking voltage @ $T_j=125^{\circ}C$	I_R	5.0 500	uA
Typical Junction Capacitance (Note 1)	C_j	245	pF
Typical Thermal Resistance	$R_{\theta JC}$	0.36	℃/W
Operating Temperature Range	T_j	-55 to+150	℃
Storage Temperature Range	T_{STG}	-55 to+150	℃

Note:

1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C



4. Rating And Characteristic Curves

Fig. 1 Forward Current Derating Curve

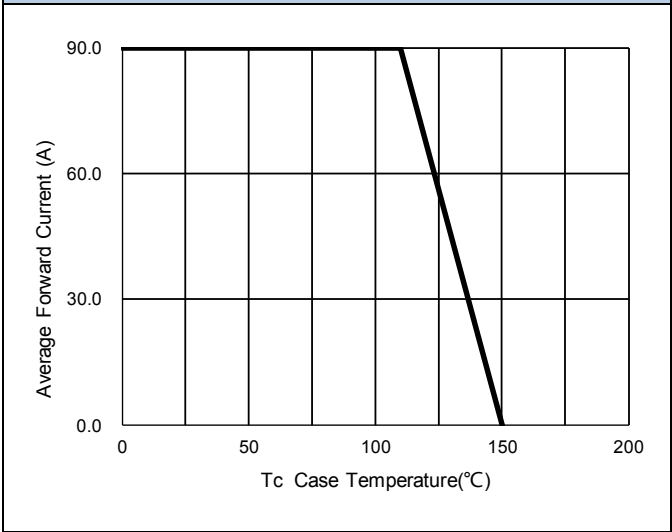


Fig. 2 Typical Forward Characteristics

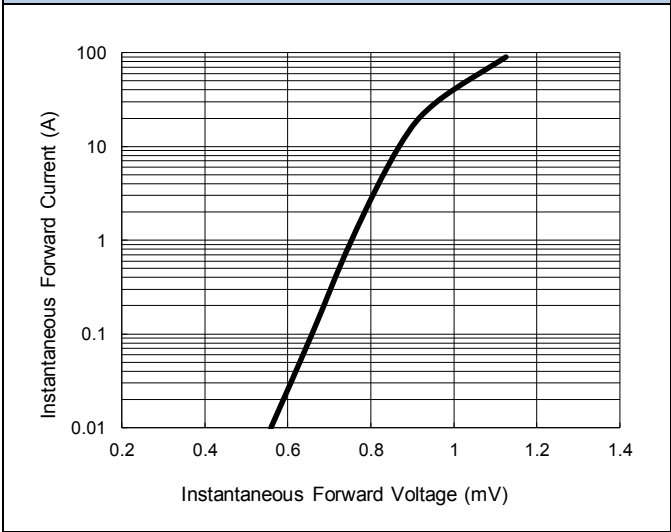


Fig. 3 Forward Surge Current Capability

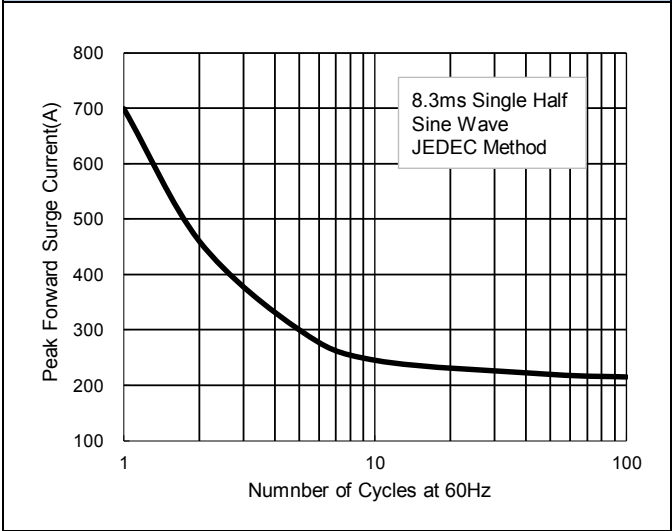
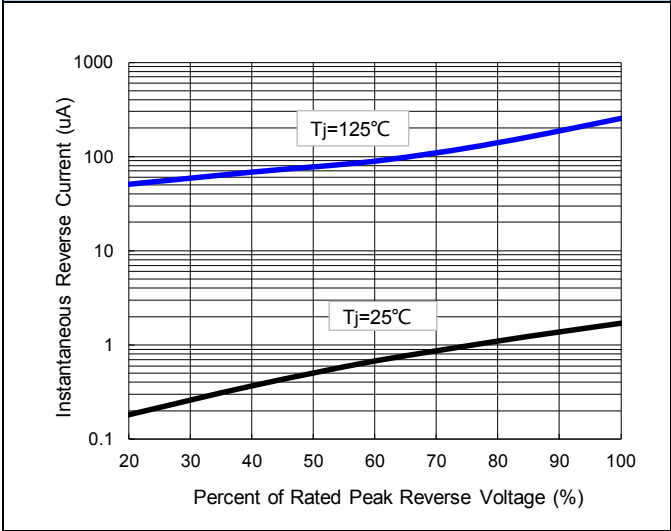


Fig.4 Typical Reverse Characteristics

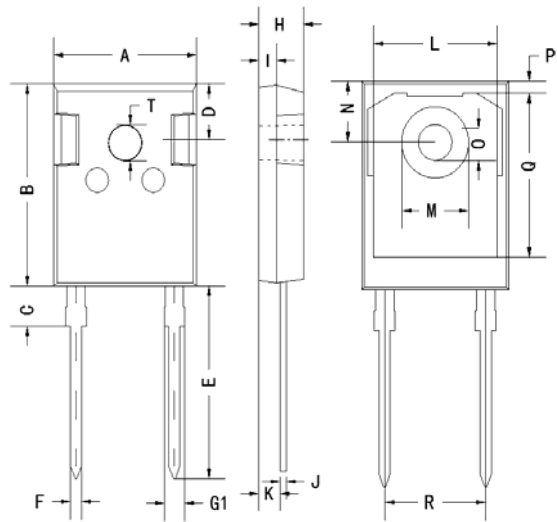




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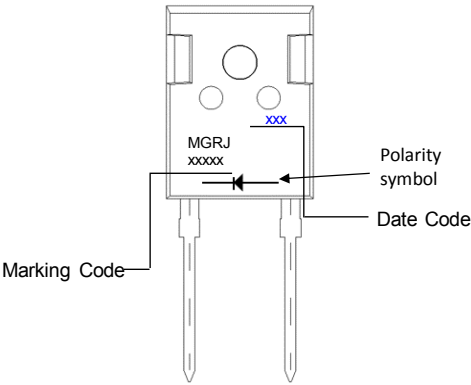
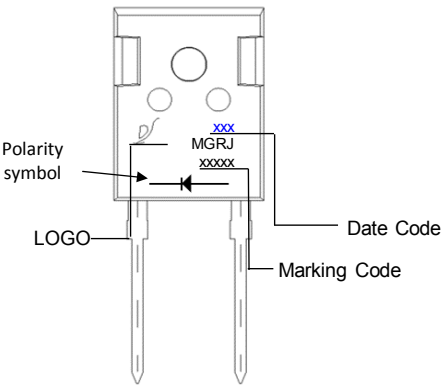
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5. Dimensions



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.614	0.630	15.60	16.00
B	0.819	0.835	20.80	21.20
C	0.155	0.170	3.93	4.33
D	0.220	0.236	5.60	6.00
E	0.776	0.792	19.72	20.12
F	0.046	0.050	1.16	1.26
G		0.089		2.25
H	0.193	0.201	4.90	5.10
I	0.075	0.083	1.90	2.10
J	0.021	0.029	0.53	0.725
K	0.091	0.099	2.31	2.51
L	0.516	0.531	13.10	13.50
M	0.276	0.291	7.00	7.40
N	0.238	0.246	6.05	6.25
O	0.14	0.15	3.55	3.75
P	0.04	0.05	1.05	1.35
Q	0.64	0.66	16.25	16.85
R	0.42	0.44	10.68	11.08
T	0.14	0.15	3.65	3.85

6. Part Marking System



7. Package Information

Package	Packing Type	Tube Size	Quantity(pcs)
		mm	
TO247-2L	Tube	416*45.3*7.5	25



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