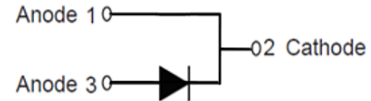




1. Features

- Glass passivated chip junction.
- High frequency operation.
- High current capability.
- High reliability.
- Fast switching for high efficiency.
- RoHS Compliant.

TO-220AC



2. Mechanical Data

- Case: Molded Plastic, TO220AC .
- 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°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	MGR30160C	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 @ $T_c=100^\circ\text{C}$	$I_{F(AV)}$	30.0	A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed @ $T_J=25^\circ\text{C}$ on rated load (JEDEC Method)	I_{FSM}	200	A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	166.00	A^2s
Maximum Instantaneous Forward Voltage @ $I_F=30\text{A}$	V_{FM}	1.25	V
Maximum DC reverse current @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=125^\circ\text{C}$	I_R	10.0 200	μA
Typical Junction Capacitance	C_J	60	pF
Typical Thermal Resistance	$R_{\theta JC}$	3.5	$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to+150	$^\circ\text{C}$

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

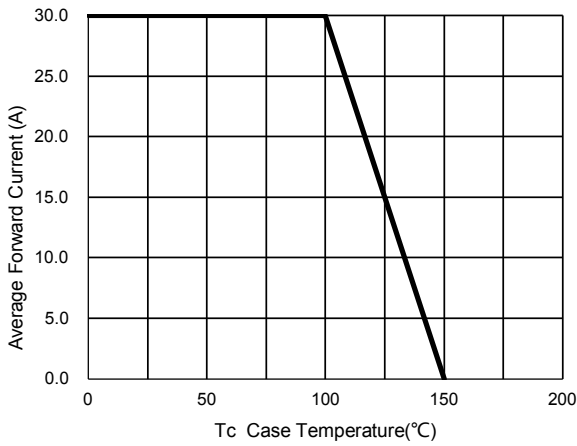


Fig. 2 Typical Forward Characteristics

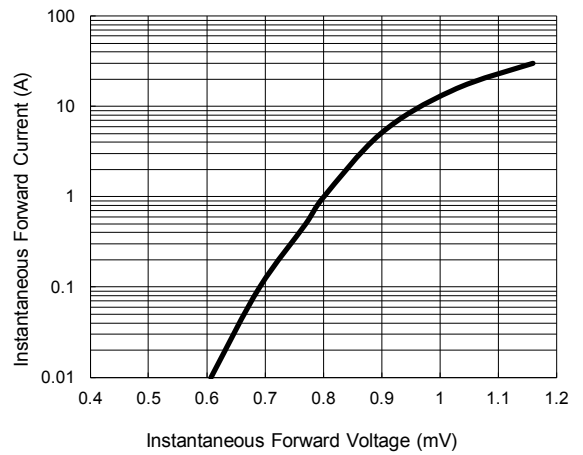


Fig. 3 Forward Surge Current Capability

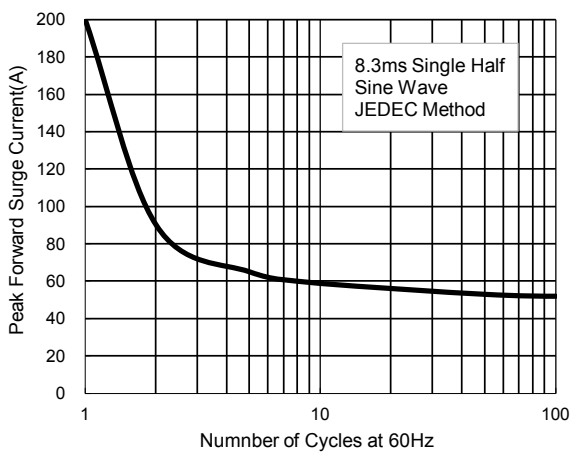
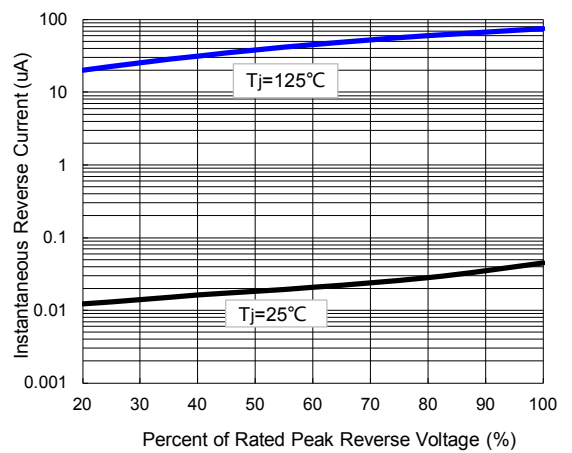
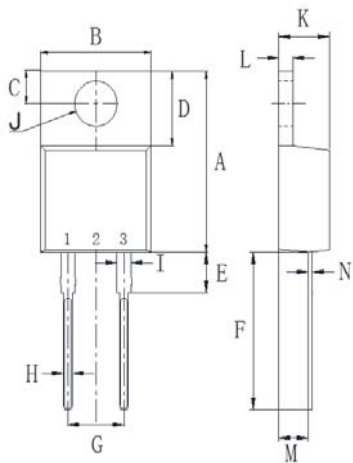


Fig. 4 Typical Reverse Characteristics



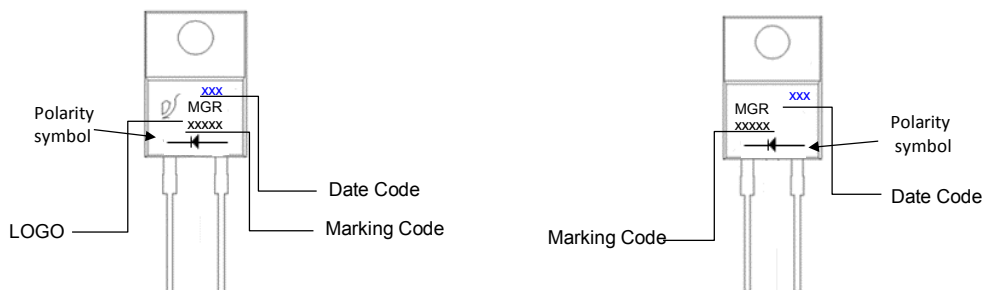


5. Dimensions



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.583	0.622	14.80	15.80
B	0.377	0.416	9.57	10.57
C	0.100	0.116	2.54	2.94
D	0.228	0.268	5.80	6.80
E	0.116	0.156	2.95	3.95
F	0.500	0.528	12.70	13.40
G	0.192	0.208	4.88	5.28
H	0.020	0.044	0.51	1.11
I	0.038	0.062	0.97	1.57
J	0.139	0.163	3.54	4.14
K	0.168	0.192	4.27	4.87
L	0.042	0.058	1.07	1.47
M	0.080	0.115	2.03	2.92
N	0.012	0.025	0.30	0.64

6. Part Marking System



7. Package Information

Package	Packing Type	Tube Size	Quantity(pcs)
		mm	
TO220AC	Tube	530*32*7	50



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