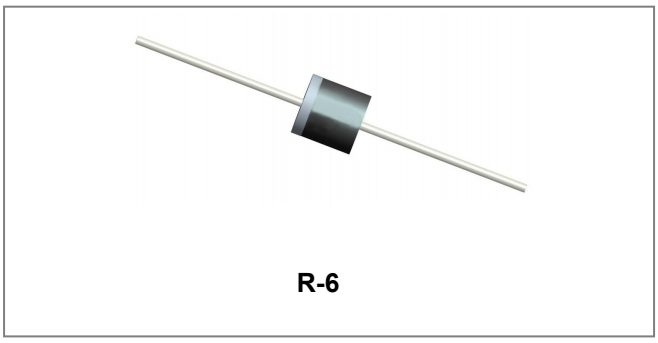
Technical Data
Data Sheet N2089, Rev. -

RoHS

10A05G THRU 10A10G
Glass Passivated Rectifiers



R-6

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0
- This is a Pb − Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram

Mechanical Data

- Case: R-6 molded plastic
- Terminals: Plated axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 2.1 grams

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Type Number	Symbol	10A05G	10A1G	10A2G	10A4G	10A6G	10A8G	10A10G	Units
Maximum repetitive peak reverse voltage Maximum DC blocking voltage	V_{RRM} V_{DC}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum average forward rectified current 0.375”(9.5mm) lead length at @T_L = 100°C	$I_{(AV)}$	10							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	250							A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	259							A^2s
Maximum instantaneous forward voltage at 10.0A	V_F	1.1							V
Maximum DC reverse current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_R	5 100							μA
Typical Junction Capacitance (Note 1)	C_J	150							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	6							°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance from junction to ambient at 0.375”(9.5mm)lead length, P.C.B. mounted.

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Ratings and Characteristics Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

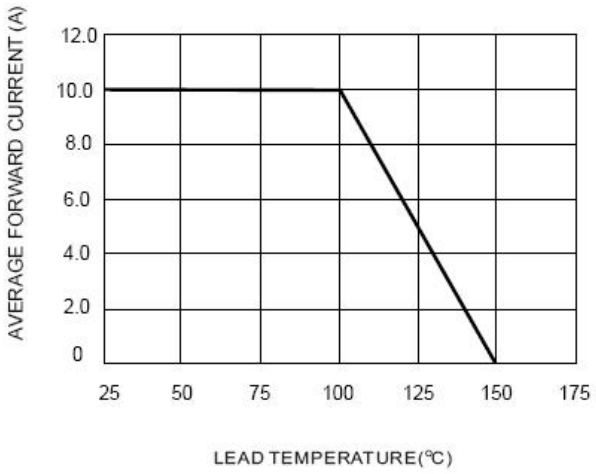


FIG.2-TYPICAL FORWARD CHARACTERISTICS

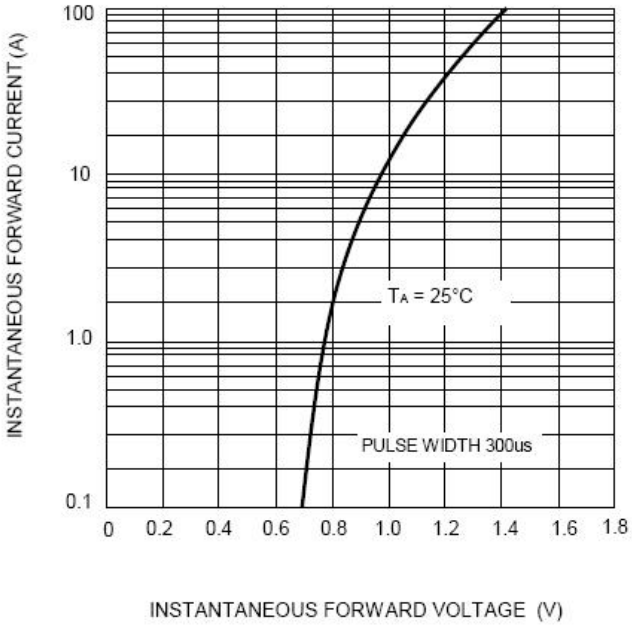


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

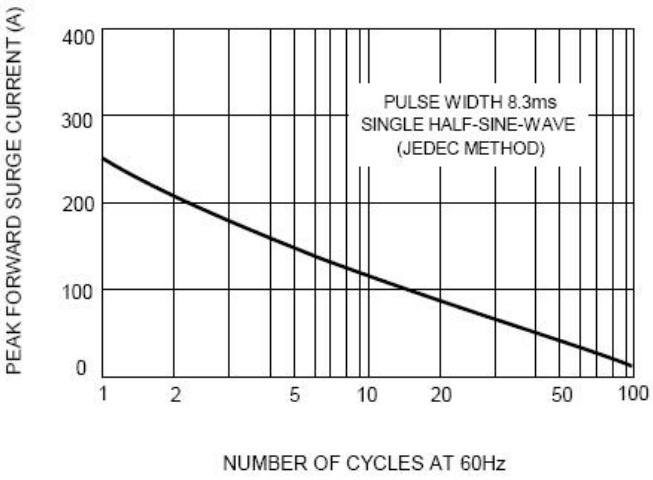
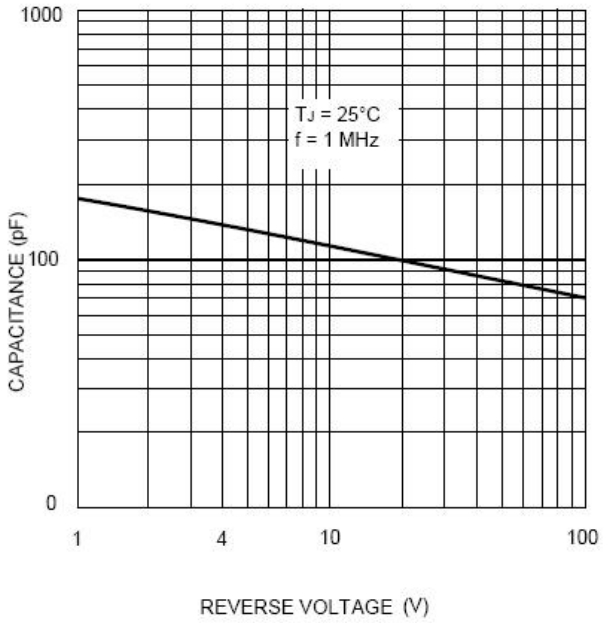


FIG.4 – TYPICAL JUNCTION CAPACITANCE



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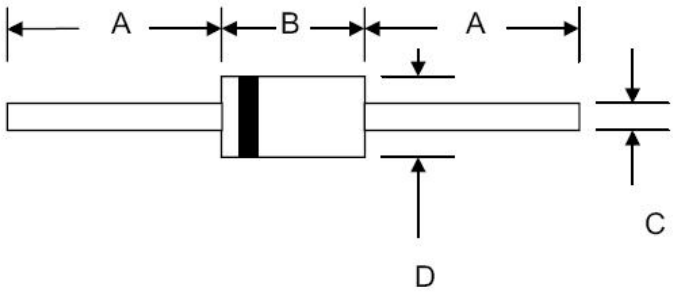
Mechanical Dimensions R-6



SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.4	-	1.000	-
B	8.60	9.10	0.340	0.360
C	1.2	1.3	0.048	0.052
D	8.60	9.10	0.340	0.360

Ordering Information

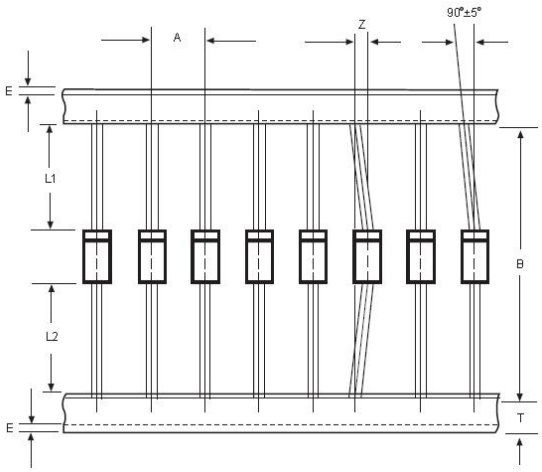
Device	Package	Shipping
10A05G-10A10G	R-6(Pb-Free)	500pcs / tape
10A05GTA-10A10GTA	R-6(Pb-Free)	500pcs / tape
10A05GTR-10A10GTR	R-6(Pb-Free)	500pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

10A05G = Type Number

Carrier Tape Specification R-6



SYMBOL	Millimeters	
	Min.	Max.
A	9.50	10.50
B	50.9	53.9
Z	-	1.20
T	5.60	6.40
E	-	0.80
IL1-L2I	-	1.0

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