1G1 THRU 1G7

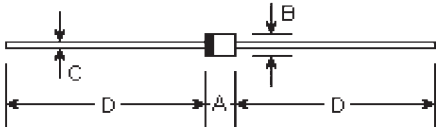
MINIATURE GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - 50 to 1000 Volts
Forward Current - 1.0 Ampere

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame retardant epoxy molding compound
- Glass passivated junction version of 1G1 thru 1G7 in R-1 package
- 1.0 ampere operation at T_A=75℃ with no thermal runaway

R-1



Mechanical Data

- **Case:** Molded plastic, R-1
- **Terminals:** Axial leads, solderable per MIL-STD-202, method 208
- **Polarity:** Color band denotes cathode
- **Mounting Position:** Any
- **Weight:** 0.007 ounce, 0.205 gram

DIMENSIONS					
DIM	inches		mm		Note
	Min.	Max.	Min.	Max.	
A	0.114	0.138	2.9	3.5	
B	0.095	0.099	2.42	2.51	ф
C	0.020	0.024	0.5	0.6	ф
D	1.000	-	25.40	-	

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.

	Symbols	1G1	1G2	1G3	1G4	1G5	1G6	1G7	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T_A=75℃	$I_{(AV)}$	1.0							Amp
Peak forward surge current, I_{FM} (surge): 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method)	I_{FSM}	30.0							Amps
Maximum forward voltage at 1.0A	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage T_A=25℃ / T_A=100℃	I_R	5.0 / 100.0							μA
Typical junction capacitance (Note 1)	C_J	15.0							pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	50.0							℃/W
Operating and storage temperature range	T_J, T_{STG}	-55 to +150							℃

Notes:

(1) Measured at 1.0MHz and applied reverse voltage of 4.0 VDC

(2) Thermal resistance junction to ambient

RATINGS AND CHARACTERISTIC CURVES

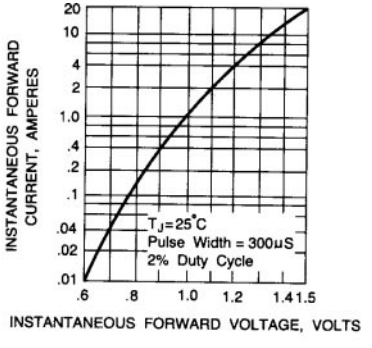


Fig. 1 – TYPICAL FORWARD CHARACTERISTICS

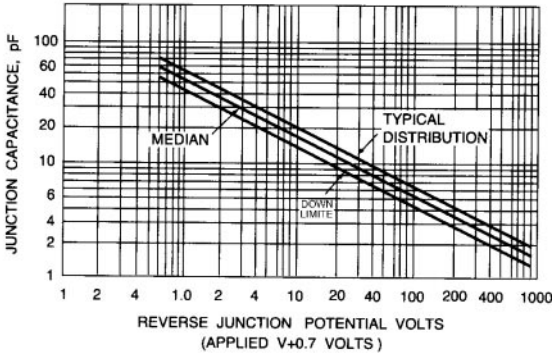


Fig. 2 – JUNCTION CAPACITANCE

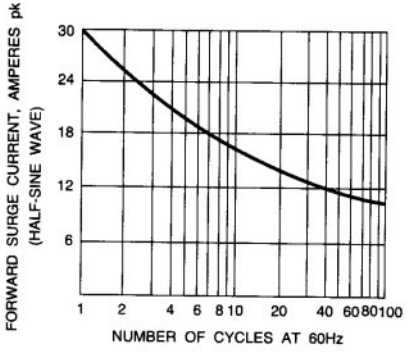


Fig. 3 – PEAK FORWARD SURGE CURRENT

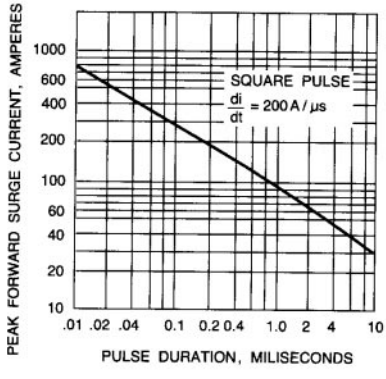


Fig. 4 – PEAK FORWARD SURGE CURRENT

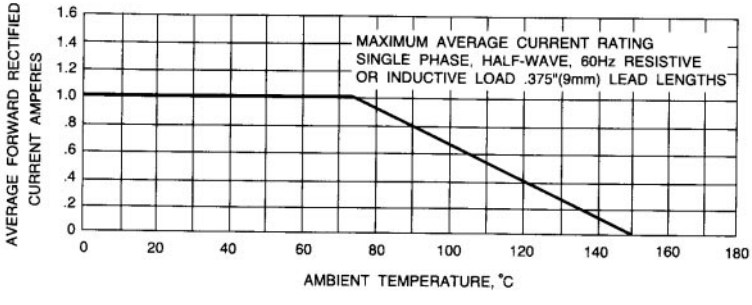


Fig. 5 – FORWARD DERATING CURVE