GI250-1 THRU GI250-4

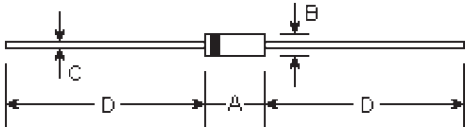
HIGH VOLTAGE GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - 1000 to 4000 Volts
Forward Current - 0.25 Ampere

Features

- Plastic package has Underwriters Laboratory Flammability
- High temperature metallurgically bonded construction classification 94V-0
- Glass passivated cavity-free junctions
- Capable of meeting environmental standards of MIL-S-19500
- High temperature soldering guaranteed: 350℃/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3Kg) tension.

DO-41



Mechanical Data

- **Case:** DO-41 molded plastic over glass body
- **Terminals:** Plated axial leads, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any
- **Weight:** 0.012 ounce, 0.335 gram

DIMENSIONS					
DIM	inches		mm		Note
	Min.	Max.	Min.	Max.	
A	0.165	0.205	4.2	5.2	
B	0.079	0.106	2.0	2.7	ϕ
C	0.028	0.034	0.71	0.86	ϕ
D	1.000	-	25.40	-	

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

	Symbols	GI250-1	GI250-2	GI250-3	GI250-4	Units
Maximum repetitive peak reverse voltage	V_{RRM}	1000	2000	3000	4000	Volts
Maximum RMS voltage	V_{RMS}	700	1400	2100	2800	Volts
Maximum DC blocking voltage	V_{DC}	1000	2000	3000	4000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T_A=75℃	$I_{(AV)}$	0.25				Amp
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method) at T_A=75℃	I_{FSM}	15.0				Amps
Maximum instantaneous forward voltage at 0.25A	V_F	3.5				Volts
Maximum DC reverse current at rated DC blocking voltage T_A=25℃ / T_A=100℃	I_R	5.0 50.0				μA
Typical reverse recovery time (Note 1)	T_{rr}	2.0				μS
Typical junction capacitance (Note 2)	C_J	3.0				ρF
Typical thermal resistance (Note 3)	$R_{\theta JA}$	130.0				℃/W
Operating junction and storage temperature range	T_J, T_{STG}	-60 to +175				℃

Notes:

(1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A

(2) Measured at 1.0MHz and applied reverse voltage of 4.0 volts

(3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

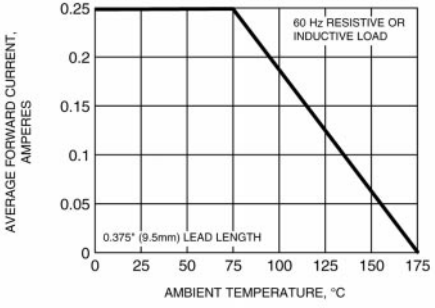


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

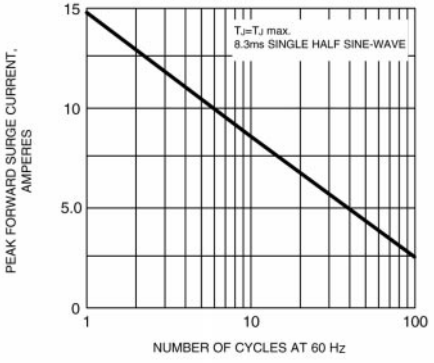


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

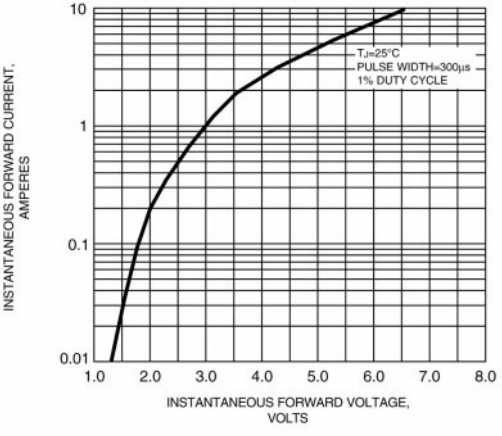


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

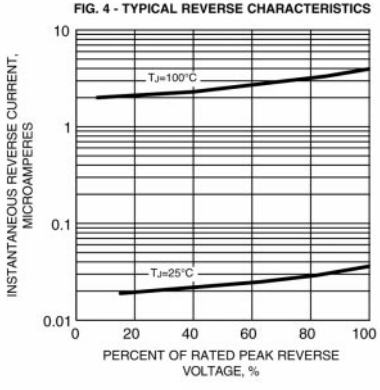


FIG. 5 - TYPICAL JUNCTION CAPACITANCE