



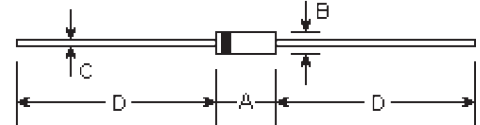
# GI250-1 THRU GI250-4

**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°C/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

DIM	DIMENSIONS				Note
	inches		mm		
	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°C 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 $T_A=75^\circ\text{C}$	$I_{(AV)}$	0.25				Amp
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method) at $T_A=75^\circ\text{C}$	$I_{FSM}$	15.0				Amps
Maximum instantaneous forward voltage at 0.25A	$V_F$	3.5				Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$	5.0 50.0				$\mu\text{A}$
Typical reverse recovery time (Note 1)	$T_{rr}$	2.0				$\mu\text{S}$
Typical junction capacitance (Note 2)	$C_J$	3.0				$\mu\text{F}$
Typical thermal resistance (Note 3)	$R_{\theta JA}$	130.0				$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-60 to +175				$^\circ\text{C}$

### Notes:

- (1) Reverse recovery test conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_r=0.25\text{A}$
- (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

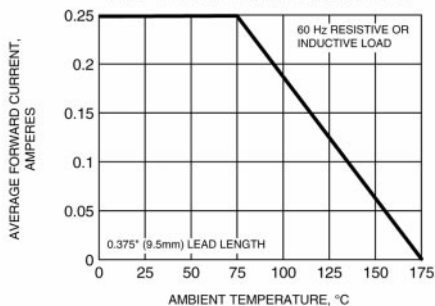


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

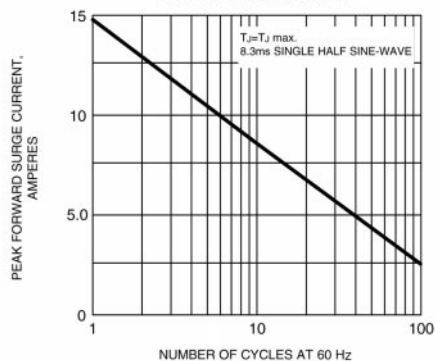


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

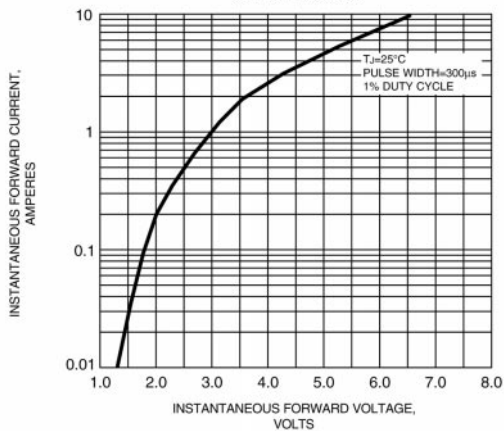


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

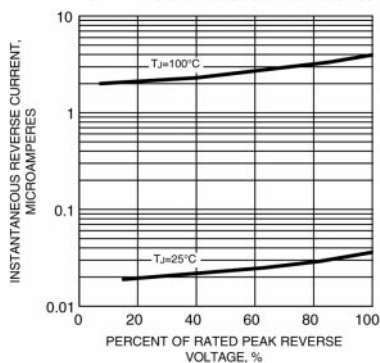


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

