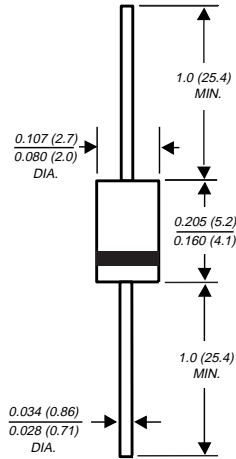


# GI250-1 THRU GI250-4

**HIGH VOLTAGE GLASS PASSIVATED JUNCTION RECTIFIER**  
*Reverse Voltage - 1000 to 4000 Volts      Forward Current - 0.25 Ampere*

**PATENTED\***

**DO-204AL**



*Dimensions in inches and (millimeters)*

\* Glass-plastic encapsulation technique is covered by

Patent No. 3,996,602 and brazed-lead assembly by Patent No. 3,930,306

**SUPERECTIFIER**

## 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

## MECHANICAL DATA

**Case:** JEDEC DO-204AL 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, 0.3 gram

## 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 <sub>RRM</sub>	1000	2000	3000	4000	Volts
Maximum RMS voltage	V <sub>RMS</sub>	700	1400	2100	2800	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	1000	2000	3000	4000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T <sub>A</sub> =75°C	I <sub>(AV)</sub>	0.25				Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load at T <sub>A</sub> =75°C (JEDEC Method)	I <sub>FSM</sub>	15.0				Amps
Maximum instantaneous forward voltage at 0.25A	V <sub>F</sub>	3.5				Volts
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	5.0 50.0				μA
Typical reverse recovery time (NOTE 1)	t <sub>rr</sub>	2.0				μs
Typical junction capacitance (NOTE2)	C <sub>J</sub>	3.0				pF
Typical thermal resistance (NOTE 3)	R <sub>θJA</sub>	130.0				°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175				°C

**NOTES:**

- (1) Reverse recovery test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A
- (2) Measured at 1.0 MHz 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 GI250-1 THRU GI250-4

FIG. 1 - FORWARD CURRENT DERATING CURVE

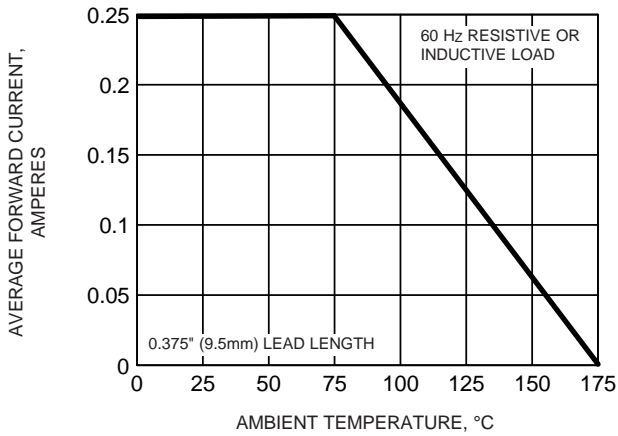


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

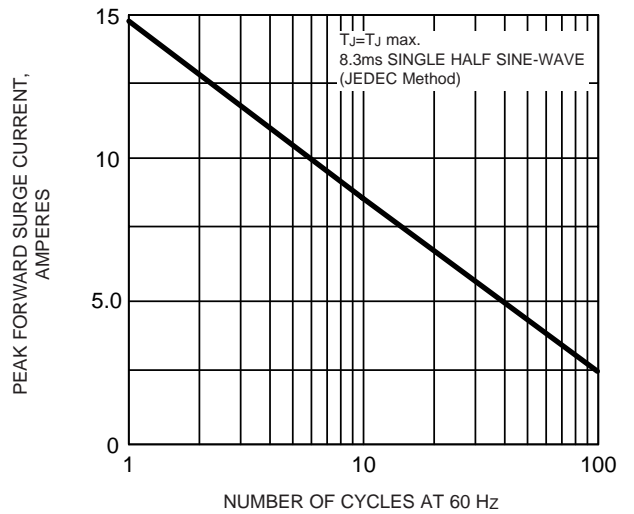


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

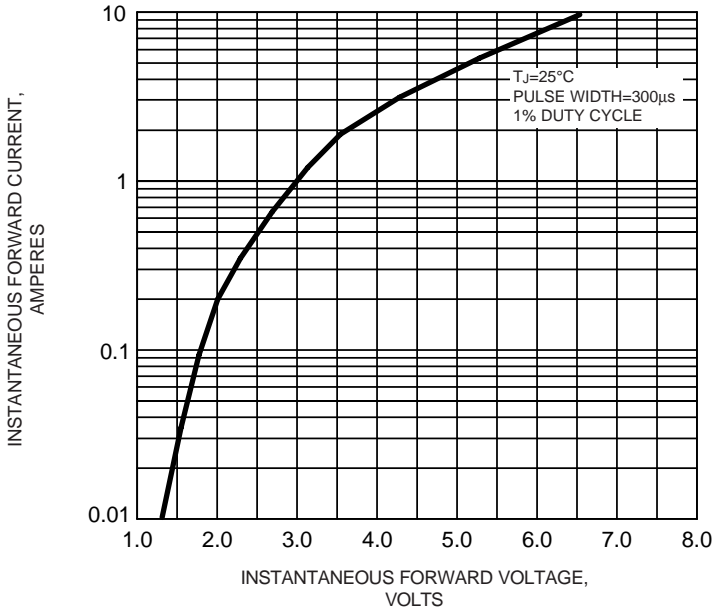


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

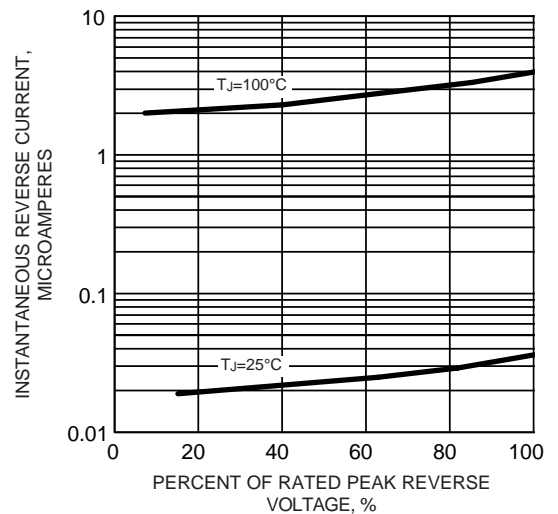


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

