

GI1101 THRU GI1104

GLASS PASSIVATED FAST EFFICIENT RECTIFIER

Reverse Voltage - 50 to 200 Volts

Forward Current - 2.5 Amperes

FEATURES

- ♦ High temperature metallurgically bonded construction
- ♦ Glass passivated cavity-free junction
- ♦ Superfast recovery time for high efficiency
- ♦ Low forward voltage, high current capability
- ♦ Capable of meeting environmental standards of MIL-S-19500
- ♦ Hermetically sealed package
- ♦ Low Leakage
- ♦ High surge capability
- ♦ High temperature soldering guaranteed:
350°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-204AP solid glass body

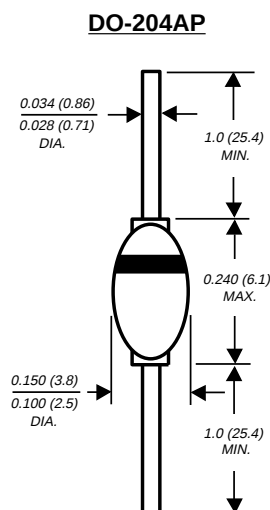
Terminals: Plated axial leads, solderable per MIL-STD 750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.02 ounce, 0.56 gram

PATENTED *



Dimensions in inches and (millimeters)

* Brazed lead assembly is covered by Patent No. 3,930,306

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	GI1101	GI1102	GI1103	GI1104	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	Volts
Maximum RMS voltage	V _{RMS}	35	70	105	140	Volts
Maximum DC blocking voltage	V _{DC}	50	100	150	200	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length (SEE FIG.1)	I _(AV)	2.5			2.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at rated T _L	I _{FSM}	50.0				Amps
Maximum instantaneous forward voltage at 2.0A	V _F	0.975			1.25 (NOTE 5)	Volts
Maximum DC reverse current at rated DC blocking voltage T _A =25°C T _A =100°C	I _R	2.0 50.0			10.0 200.0	μA
Maximum reverse recovery time (NOTE 1)	t _{rr}	25.0			50.0	ns
Typical junction capacitance (NOTE 2)	C _J	45.0				pF
Typical thermal resistance (NOTE 1) (NOTE 4)	R _{θJA} R _{θJL}	65.0 20.0				°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +175			-65 to +150	°C

NOTES:

(1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=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 and mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads

(4) Thermal resistance from junction to lead at 0.375" (9.5mm) lead length with both leads attached to heat sinks

(5) Tested at I_F=1.0A

RATINGS AND CHARACTERISTIC CURVES GI1101 THRU GI1104

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

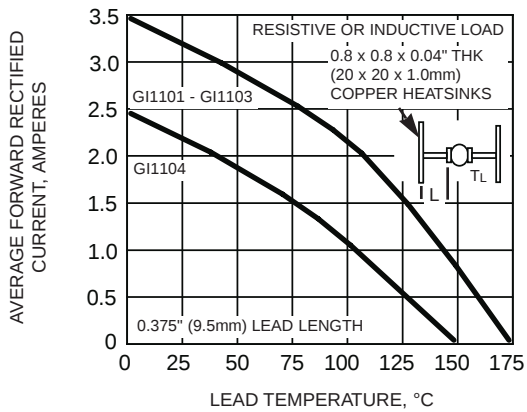


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

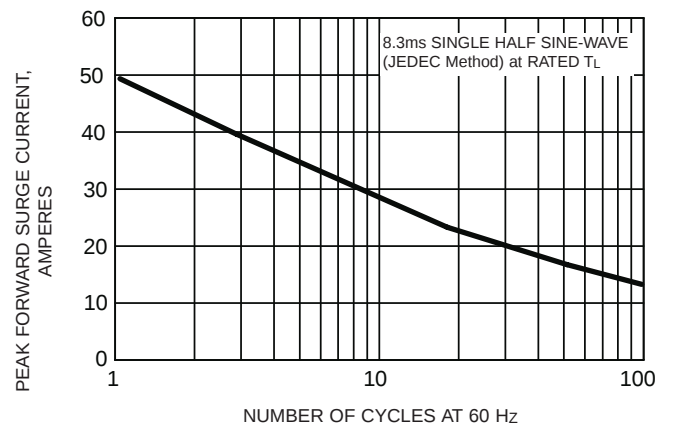


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

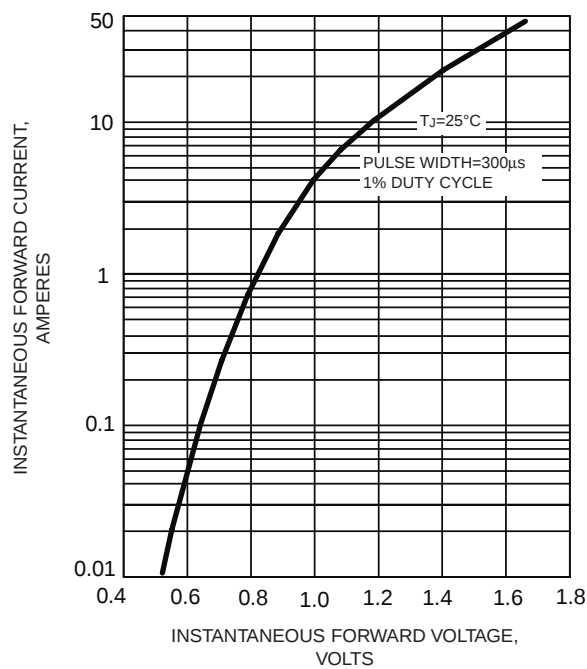


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

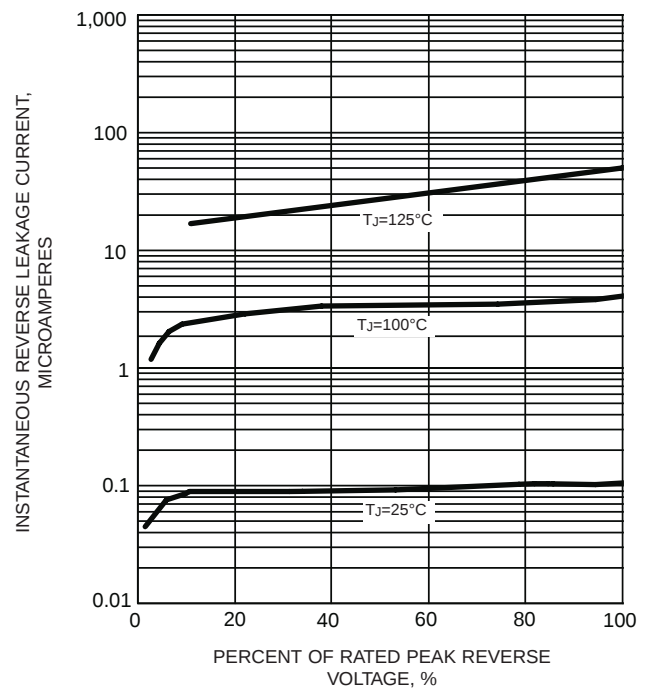


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

