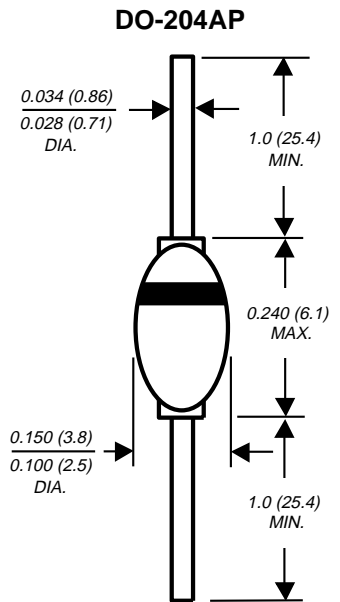
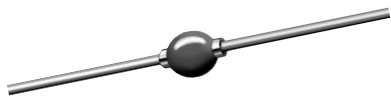


Glass Passivated Ultrafast Rectifier

Reverse Voltage 50 to 200 V

Forward Current 2.5 A



Dimensions in inches and (millimeters)

Features

- High temperature metallurgically bonded construction
- Glass passivated cavity-free junction
- Superfast recovery time for high efficiency
- Ultrafast recovery time for high efficiency
- Low forward voltage, high current capability
- Capable of meeting environmental standards of MIL-S-19500
- Hermetically sealed package
- High surge capability
- High temperature soldering guaranteed: 250°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

Maximum Ratings & Thermal 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	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	V
Maximum average forward rectified current at 0.375" (9.5mm) lead length (SEE FIG. 1)	$I_{F(AV)}$	2.5			2.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) at rated T_L	I_{FSM}	50				A
Typical thermal resistance (NOTE 1, 2)	-junction to ambient	$R_{\theta JA}$			65	°C/W
	-junction to lead	$R_{\theta JL}$			20	
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175			-65 to 150	°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

	Symbols	GI1101	GI1102	GI1103	GI1104	Units	
Maximum instantaneous forward voltage at 2.0A	V_F	0.95			1.25 (NOTE 3)	V	
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_A = 25^\circ C$	2.0			10	μA
		$T_A = 100^\circ C$	50			200	
Maximum reverse recovery time $I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A$	t_{rr}	25			50	ns	
Typical junction capacitance at 4V, 1MHz	C_J	45				pF	

NOTES:

(1) 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

(2) Thermal resistance from junction to lead at 0.375" (9.5mm) lead length with both leads attached to heatsinks

(3) Tested at $I_F = 1.0 A$

Ratings and Characteristic Curves (T_A = 25°C unless otherwise noted)

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

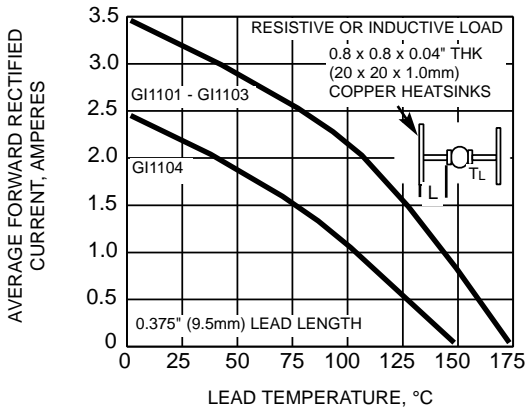


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

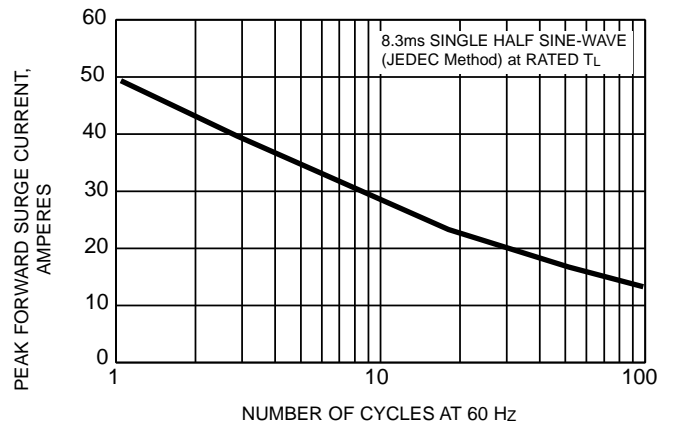


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

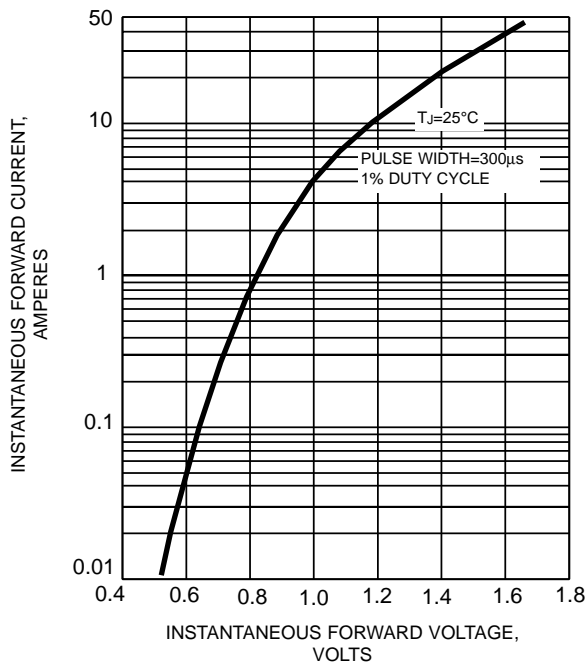


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

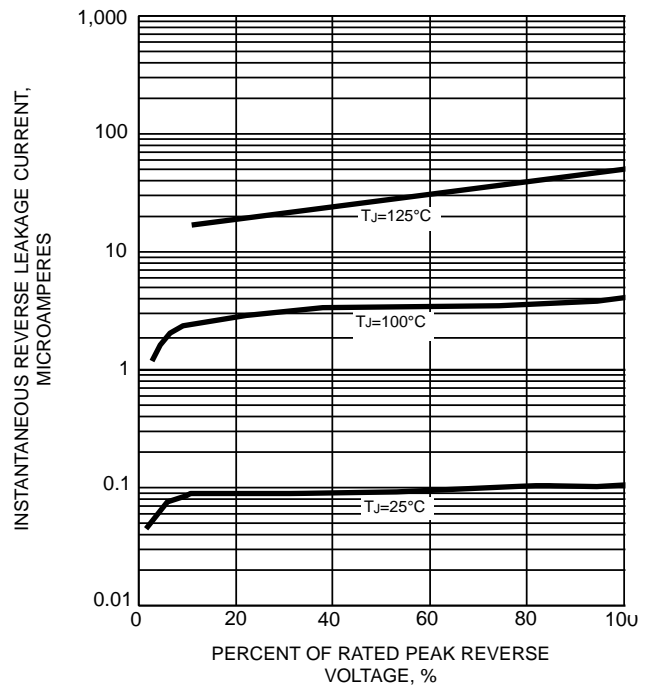


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

