

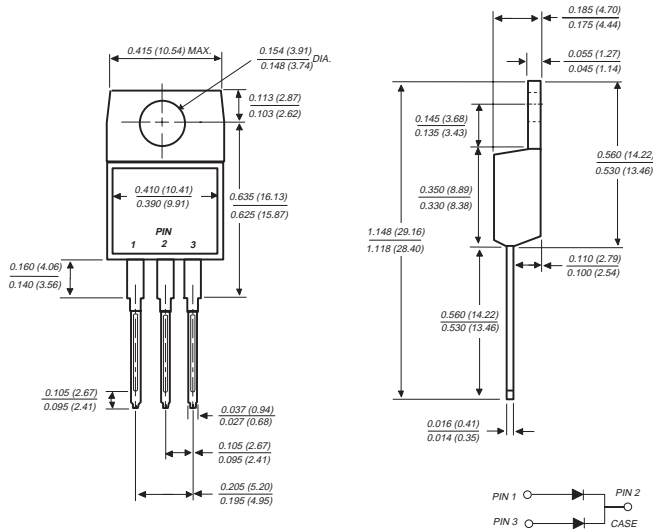
GI2401 THRU GI2404

GLASS PASSIVATED PLASTIC RECTIFIER

Reverse Voltage - 50 to 200 Volts

Forward Current - 16.0 Amperes

TO-220AB



Dimensions in inches and (millimeters)

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Dual rectifier construction, positive centertap
- ◆ Glass passivated chip junctions
- ◆ Low power loss
- ◆ High surge capability
- ◆ Superfast recovery times for high efficiency
- ◆ High temperature soldering guaranteed: 250°C, 0.16" (4.06mm) from case for 10 seconds



MECHANICAL DATA

Case: JEDEC TO-220AB molded plastic body over passivated chips

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

Polarity: As marked

Mounting Position: Any

Mounting Torque: 5 in. - lbs. max.

Weight: 0.08 ounce, 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	GI2401	GI2402	GI2403	GI2404	UNITS
Maximum recurrent 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 at $T_C=125^\circ\text{C}$	$I_{(AV)}$	16.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at $T_C=125^\circ\text{C}$	I_{FSM}	125.0				Amps
Maximum instantaneous forward voltage per leg at: $I_F=4\text{A}, T_J=25^\circ\text{C}$ $I_F=8\text{A}, T_J=25^\circ\text{C}$ $I_F=4\text{A}, T_J=100^\circ\text{C}$ $I_F=8\text{A}, T_J=100^\circ\text{C}$	V_F	0.975 0.900 0.800 0.895				Volts
Maximum DC reverse current at rated DC blocking voltage $T_C=25^\circ\text{C}$ $T_C=100^\circ\text{C}$	I_R	50.0 150.0		5.0 500.0		μA
Maximum reverse recovery time per leg (NOTE 1)	t_{rr}	35.0				ns
Typical junction capacitance per leg (NOTE 2)	C_J	85.0				pF
Typical thermal resistance per leg (NOTE 3)		$R_{\theta JA}$				16.0
$^\circ\text{C}/\text{W}$	$R_{\theta JC}$	2.2				
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +150				$^\circ\text{C}$

NOTES:

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

RATINGS AND CHARACTERISTICS CURVES GI2401 THRU GI2404

FIG. 1 - FORWARD CURRENT DERATING CURVE

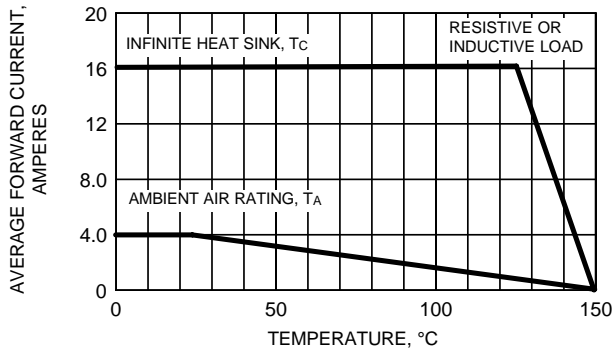


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

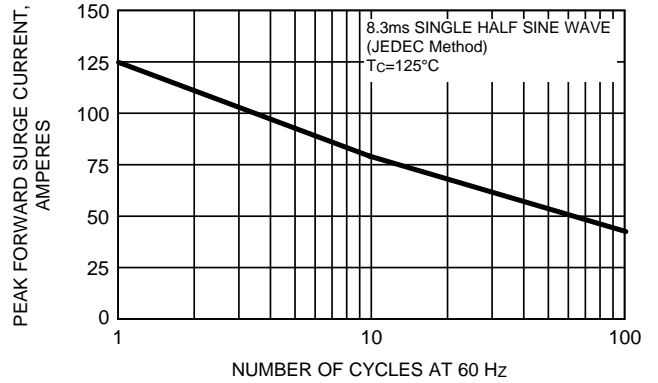


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

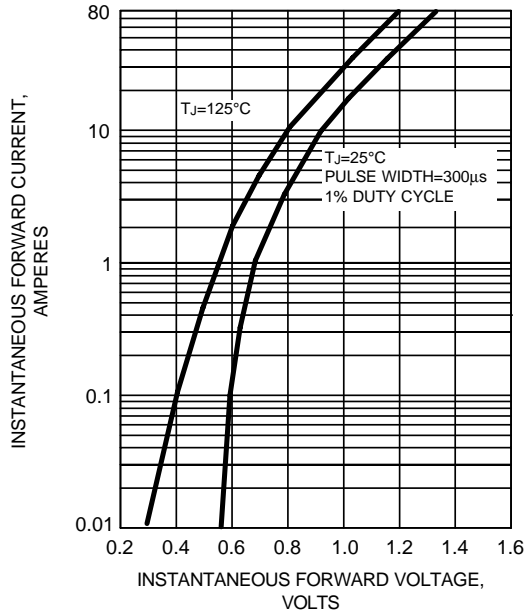


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS PER LEG

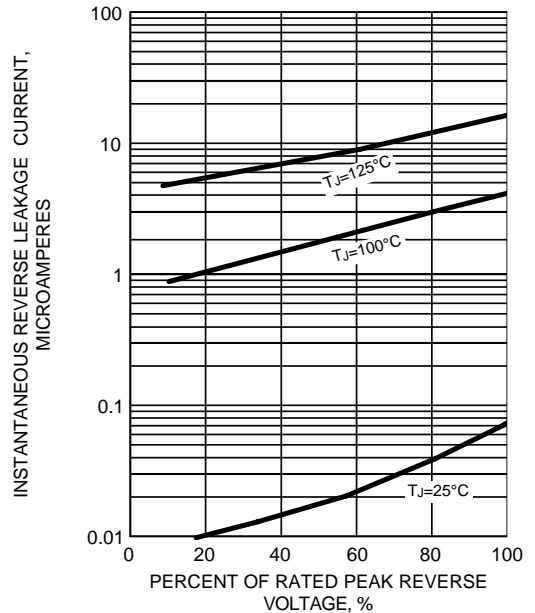


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

