

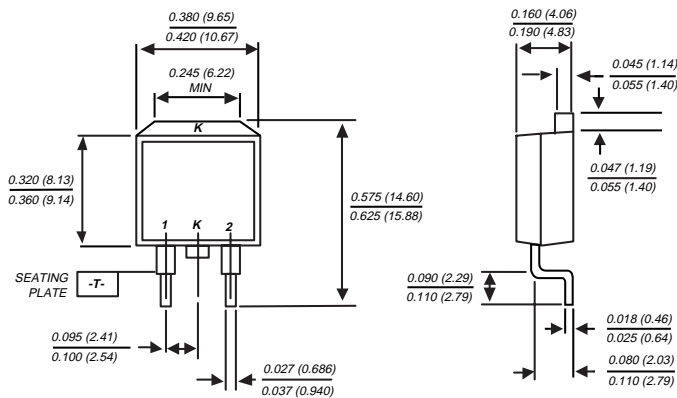
GIB2401 THRU GIB2404

GLASS PASSIVATED PLASTIC RECTIFIER

Reverse Voltage - 50 to 200 Volts

Forward Current - 16.0 Amperes

TO-263AB



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 in accordance with CECC 802 / Reflow guaranteed



MECHANICAL DATA

Case: JEDEC TO-263AB molded plastic body

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

Polarity: As marked

Mounting Position: Any

Weight: 0.08 ounce, 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	GIB2401	GIB2402	GIB2403	GIB2404	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 (NOTE 3)	$R_{\theta JC}$	2.2				$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +150				$^\circ\text{C}$

NOTES:

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

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) Thermal resistance from junction to case per leg mounted on heatsink

RATINGS AND CHARACTERISTICS CURVES GIB2401 THRU GIB2404

FIG. 1 - FORWARD CURRENT DERATING CURVE

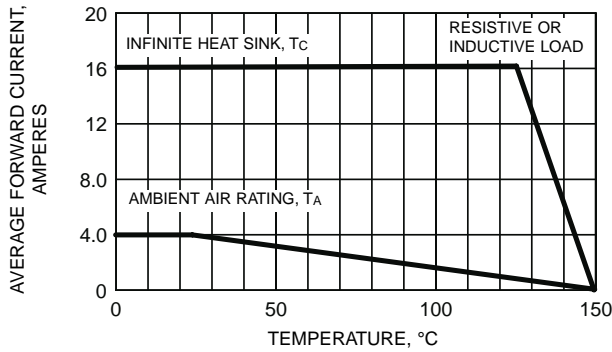


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

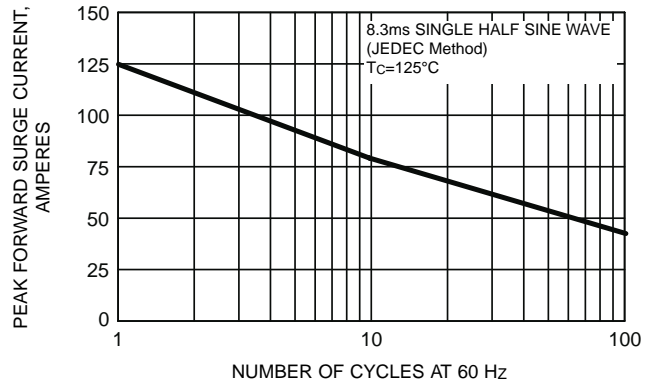


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

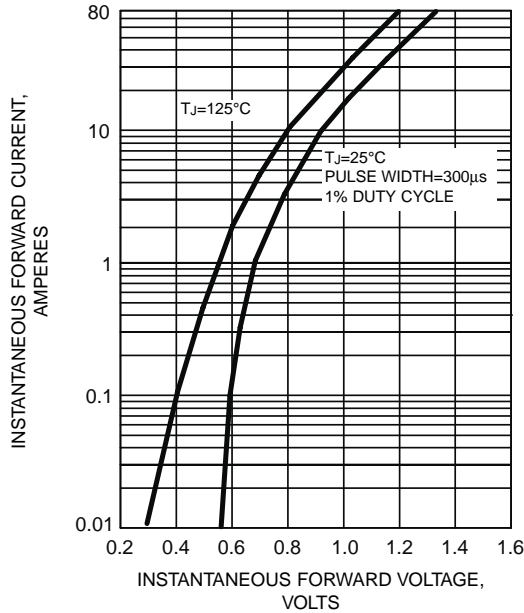


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS PER LEG

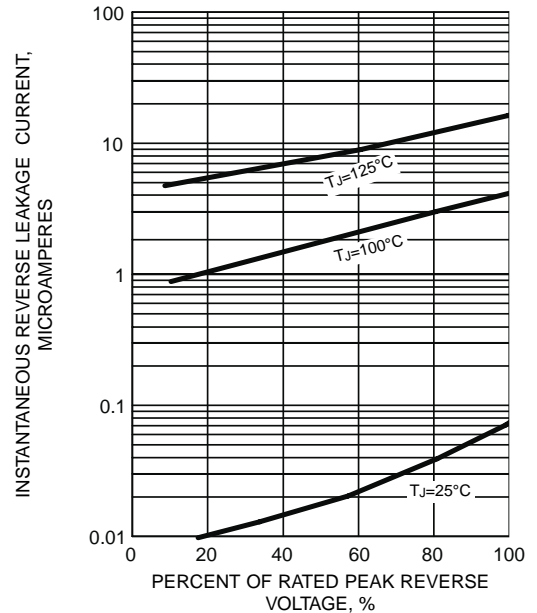


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

