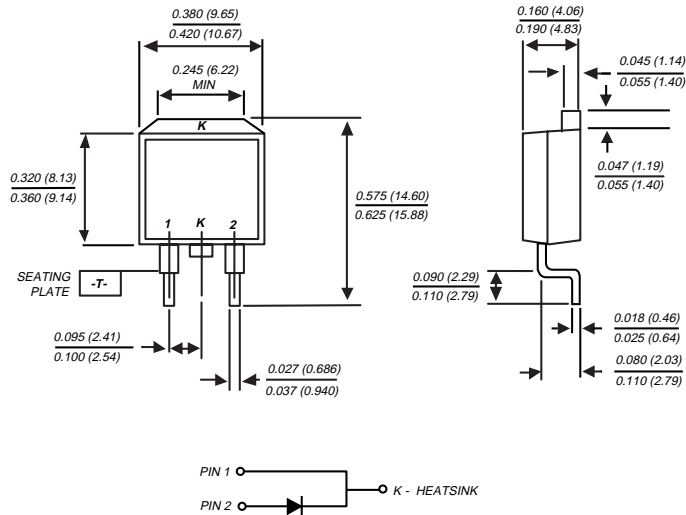


# GIB1401 THRU GIB1404

## FAST EFFICIENT PLASTIC RECTIFIER

*Reverse Voltage - 50 to 200 Volts      Forward Current - 8.0 Amperes*

### TO-263AB



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Glass passivated chip junction
- ◆ Low power loss
- ◆ Low leakage current
- ◆ High surge capability
- ◆ Superfast recovery time for high efficiency
- ◆ High temperature soldering in accordance with CECC 802 / Reflow guaranteed



### MECHANICAL DATA

**Case:** JEDEC TO-263AB molded plastic body  
**Terminals:** Lead solderable per MIL-STD-750, Method 2026  
**Polarity:** As marked  
**Mounting Position:** Any  
**Weight:** 0.064 ounce, 1.81 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

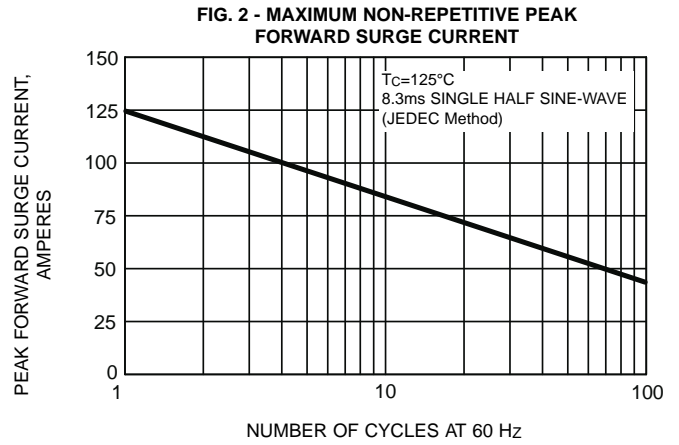
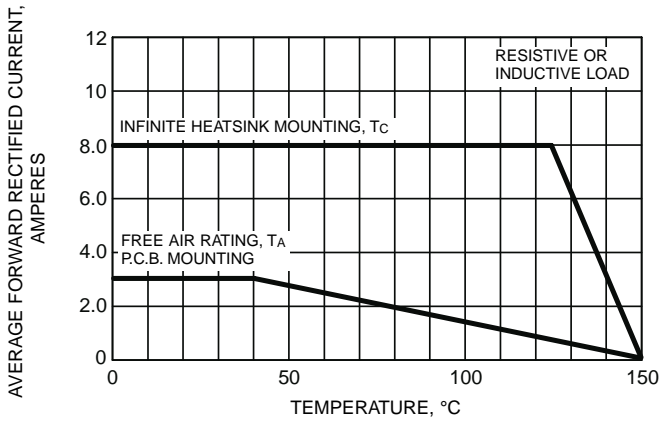
Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	GIB1401	GIB1402	GIB1403	GIB1404	UNITS
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	50	100	150	200	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	105	140	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	150	200	Volts
Maximum average forward rectified current at T <sub>C</sub> =125°C	I <sub>(AV)</sub>	8.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at T <sub>C</sub> =125°C	I <sub>FSM</sub>	125.0				Amps
Maximum instantaneous forward voltage at: I <sub>F</sub> =4A, T <sub>J</sub> =100°C I <sub>F</sub> =8A, T <sub>J</sub> =100°C I <sub>F</sub> =4A, T <sub>J</sub> =25°C I <sub>F</sub> =8A, T <sub>J</sub> =25°C	V <sub>F</sub>	0.800 0.895 0.900 0.975				Volts
Maximum DC reverse current at rated DC blocking voltage T <sub>C</sub> =25°C T <sub>C</sub> =100°C	I <sub>R</sub>	5.0 150.0				μA
Maximum reverse recovery time (NOTE 1)	t <sub>rr</sub>	35.0				ns
Typical junction capacitance (NOTE 2)	C <sub>J</sub>	85.0				pF
Typical thermal resistance (NOTE 3)	R <sub>θJC</sub>	2.25				°C/W
Operating and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150				°C

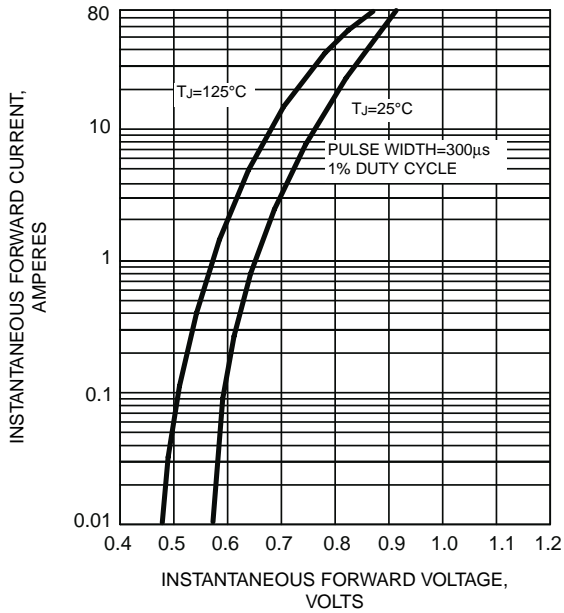
**NOTES:**

- (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 case mounted on heatsink

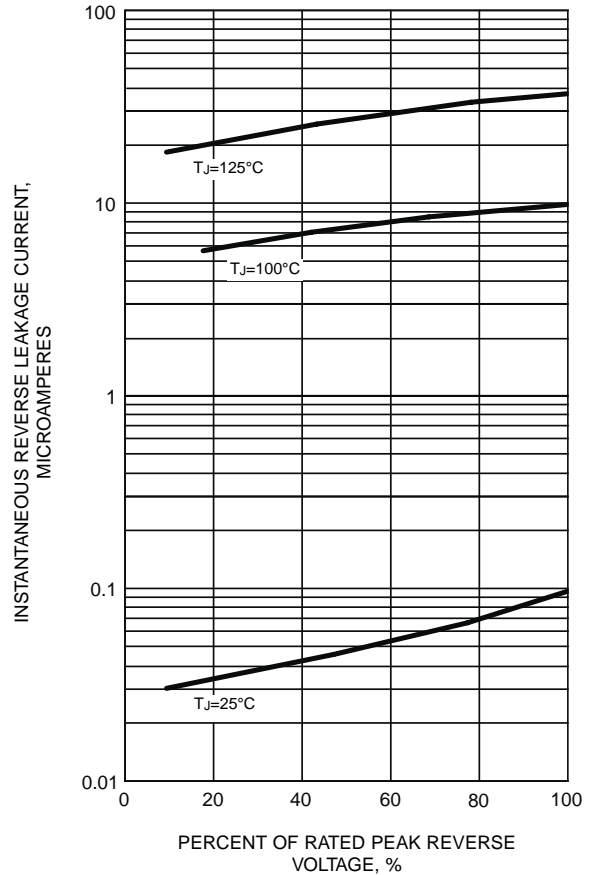
# RATINGS AND CHARACTERISTIC CURVES GIB1401 THRU GIB1404



**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**

