

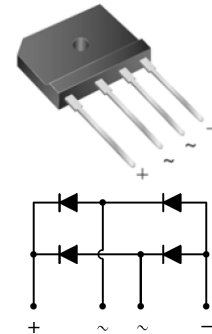


### FEATURES

- Polarity: As marked on body
- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L  
The flammability classification 94V-0
- Mounting position: Any
- Weight: 0.24 ounces , 6.79 grams

REVERSE VOLTAGE - **50 to 1000** Volts  
FORWARD CURRENT - **35.0** Amperes

### GBJ



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	GBJ 35005	GBJ 3501	GBJ 3502	GBJ 3504	GBJ 3506	GBJ 3508	GBJ 3510	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (with heatsink Note 2)	I <sub>(AV)</sub>	35							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	400							A
Maximum Forward Voltage at 17.5 A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	5.0 500							uA
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	508							A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note1)	C <sub>J</sub>	75							pF
Typical Thermal Resistance (Note2)	R <sub>θJC</sub>	0.8							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2. Device mounted on 150mm\*150mm\*1.6mm Cu Plate Heatsink.



### ■ Characteristics (Typical)

FIG1:  $I_o$ - $T_c$  Curve

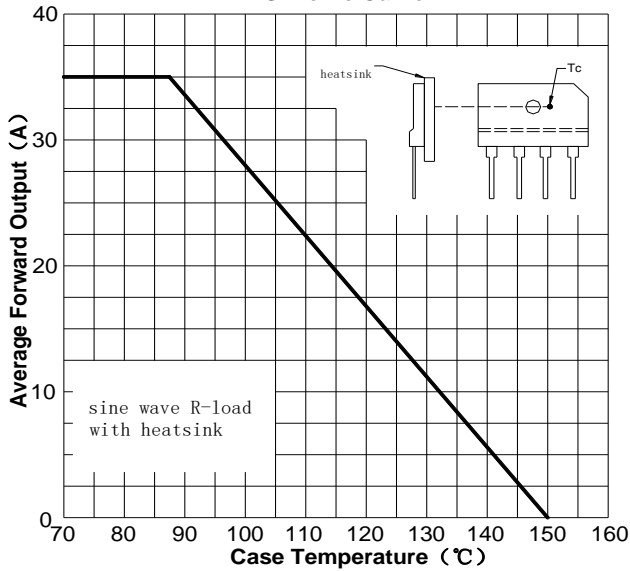


FIG2: Surge Forward Current Capability

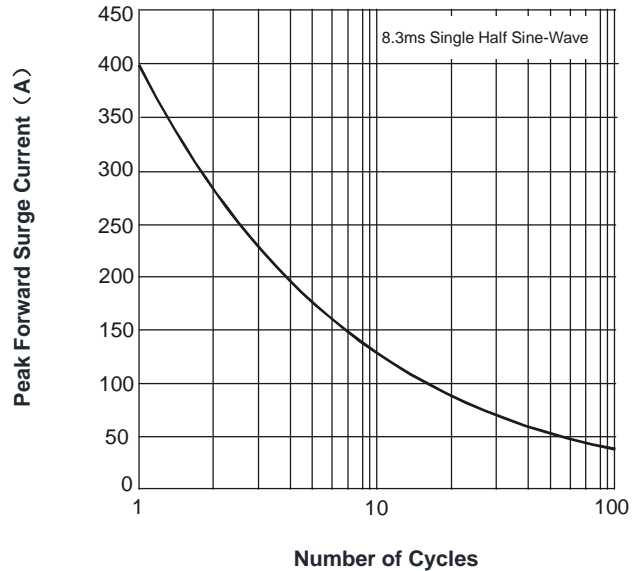


FIG3: Forward Voltage

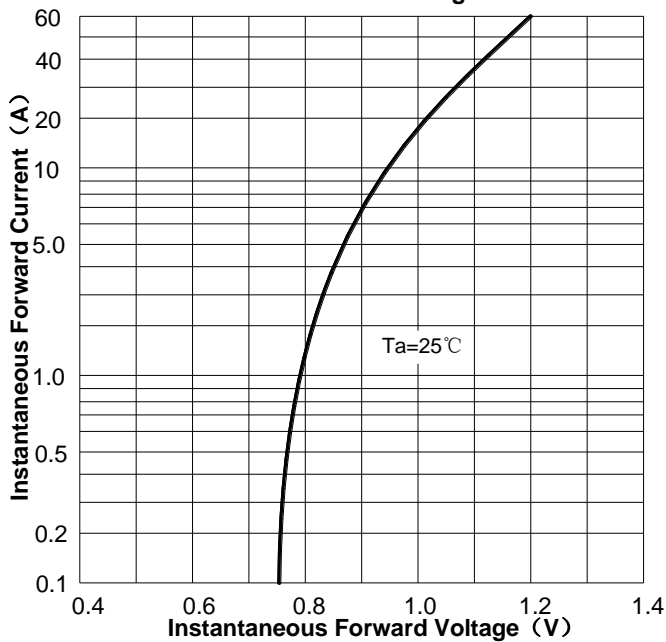
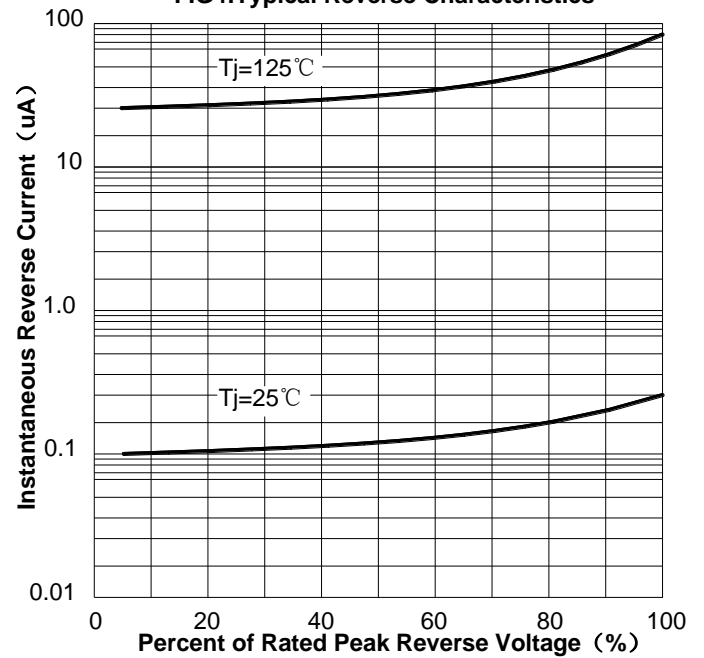
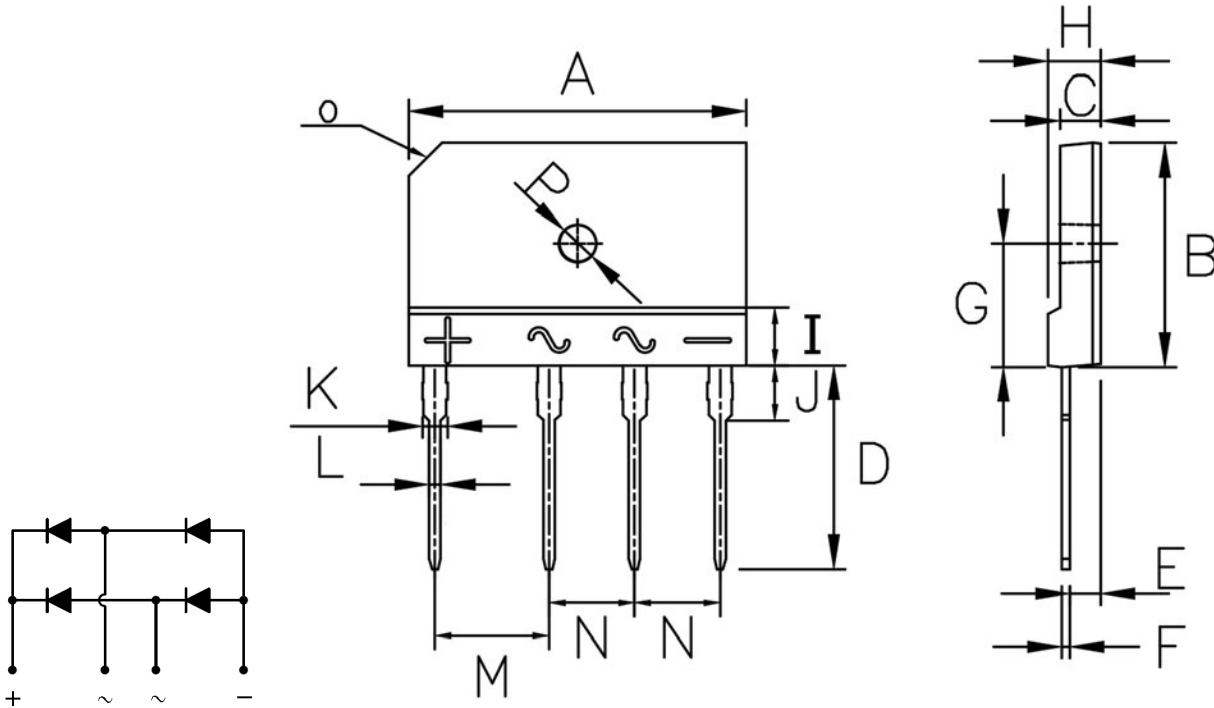


FIG4: Typical Reverse Characteristics



### GBJ Package Outline Dimensions



GBJ mechanical data

UNIT		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
mm	max	30.30	20.30	3.80	18.00	2.90	0.80	7.90	4.80	5.80	4.20	2.40	1.15	10.20	7.70	C3.0	$\phi$ 3.6
	min	29.70	19.70	3.40	17.00	2.50	0.55	7.40	4.40	4.80	3.80	2.00	0.90	9.80	7.30		$\phi$ 3.0
mil	max	1193	799	150	709	114	31	311	189	228	165	94	45	402	303	C118	$\phi$ 142
	min	1169	776	134	669	98	22	291	173	189	150	79	35	386	287		$\phi$ 118