



GBJ50AG THRU GBJ50MG

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - **50 to 1000** Volts

FORWARD CURRENT - **50.0** Amperes

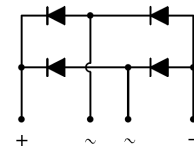
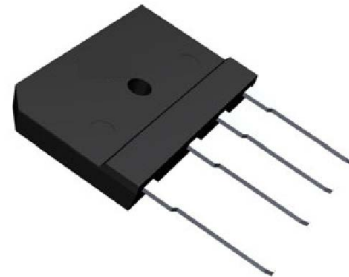
FEATURES

- 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

GBJ



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	GBJ50AG	GBJ50BG	GBJ50DG	GBJ50GG	GBJ50JG	GBJ50KG	GBJ50MG	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (with heatsink Note 2)	$I_{(AV)}$	50							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	400							A
Maximum Forward Voltage at 25 A DC	V_F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5.0 500							μA
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	664							A^2s
Typical Junction Capacitance Per Element (Note1)	C_J	140							pF
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	1.0							$^{\circ}C/W$
Operating Temperature Range	T_J	-55 to +150							$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150							$^{\circ}C$

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.



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FIG.1-FORWARD CURRENT DERATING CURVE

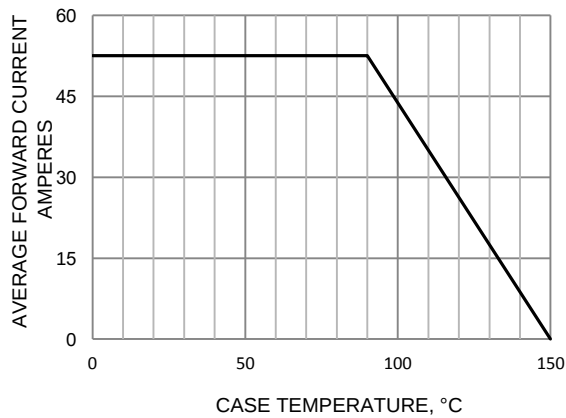


FIG.2-MAXIMUM FORWARD SURGE CURRENT

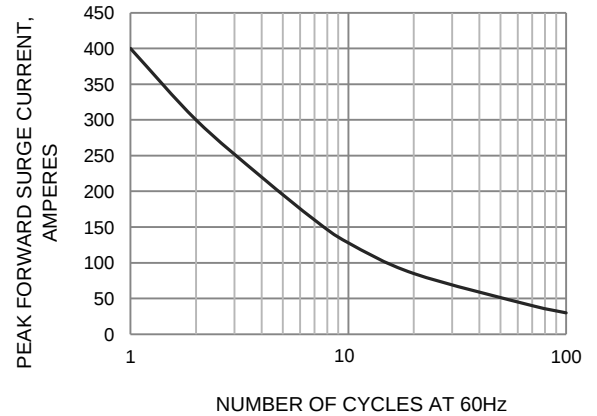


FIG.3-TYPICAL JUNCTION CAPACITANCE

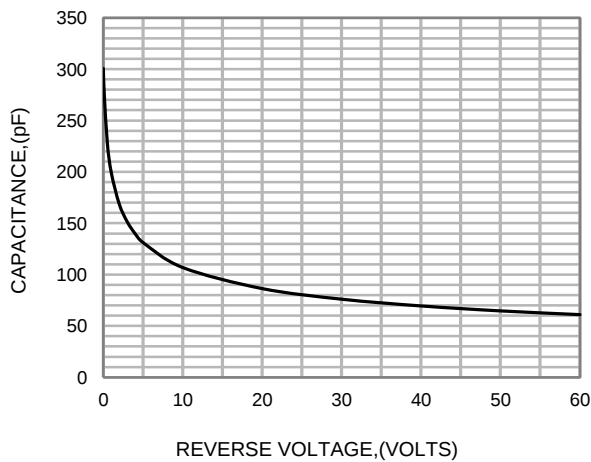


FIG.4-TYPICAL FORWARD CHARACTERISTICS

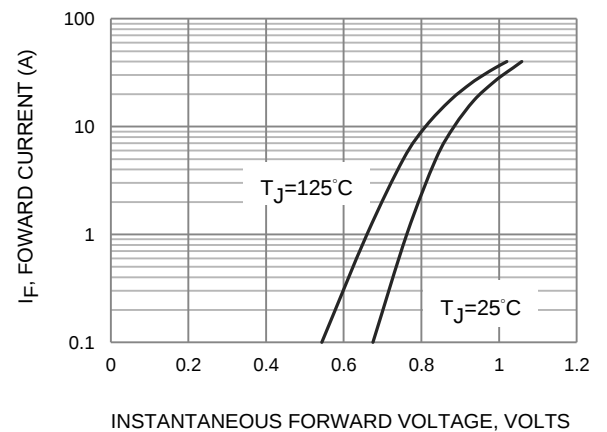
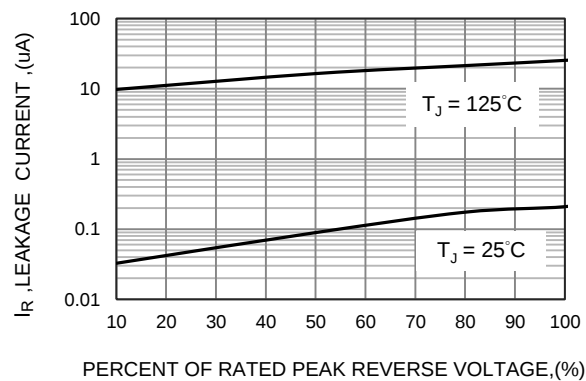
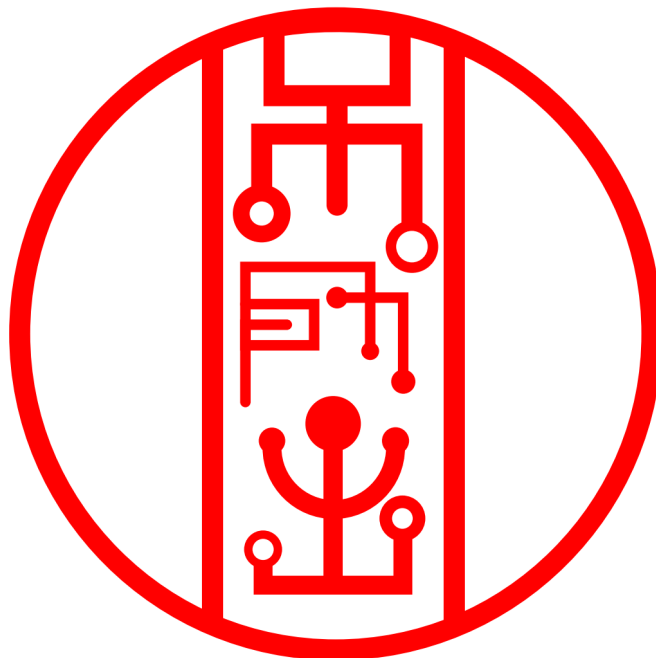
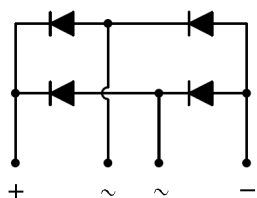


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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	11.2	4.80	5.80	4.20	2.40	1.15	10.20	7.70	C3.0	φ3.6
	min	29.70	19.70	3.40	17.00	2.50	0.55	10.8	4.40	4.80	3.80	2.00	0.90	9.80	7.30		φ3.0
mil	max	1193	799	150	709	114	31	441	189	228	165	94	45	402	303	C118	φ142
	min	1169	776	134	669	98	22	425	173	189	150	79	35	386	287		φ118