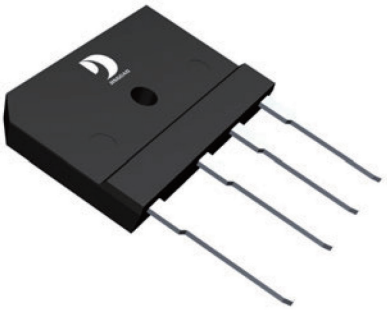
山东晶导微电子股份有限公司
Jingdao Microelectronics co.LTD

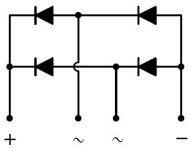
GBJ10005 thru GBJ1010

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - **50** to **1000** Volts
FORWARD CURRENT - **10.0** Amperes

GBJ





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 postition:Any
- Weight: 0.24 ounces , 6.79 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	GBJ 10005	GBJ 1001	GBJ 1002	GBJ 1004	GBJ 1006	GBJ 1008	GBJ 1010	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)	$I_{(AV)}$	10							A
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	175							A
Maximum Forward Voltage at 5.0A DC	V_F	1.0							V
Maximum DC Reverse Current T_J=25℃ at Rated DC Blocking Voltage T_J=125℃	I_R	5.0 500							uA
I^2t Rating for Fusing (t<8.3ms)	I^2t	166							A^2s
Typical Junction Capacitance Per Element (Note1)	C_J	50							pF
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	2.5							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

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.

FIG.1-FORWARD CURRENT DERATING CURVE

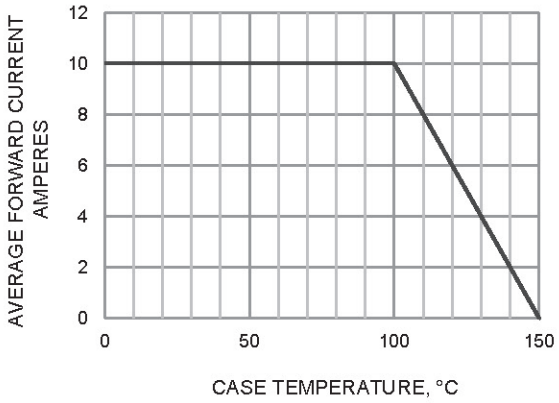


FIG.2-MAXIMUM FOWARD SURGE CURRENT

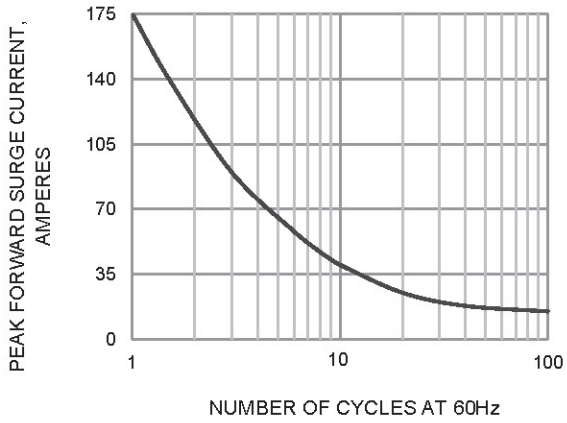


FIG.3-TYPICAL JUNCTION CAPACITANCE

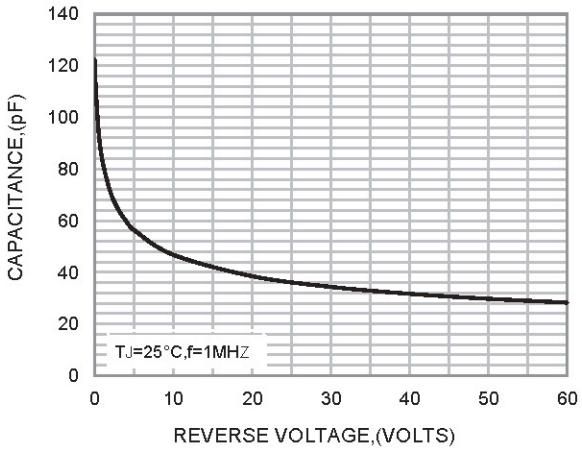


FIG.4-TYPICAL FORWARD CHARACTERISTICS

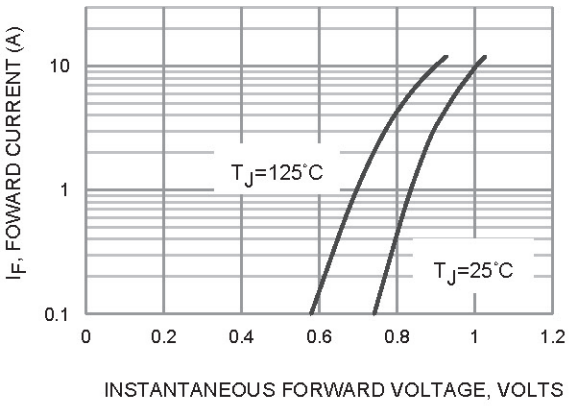
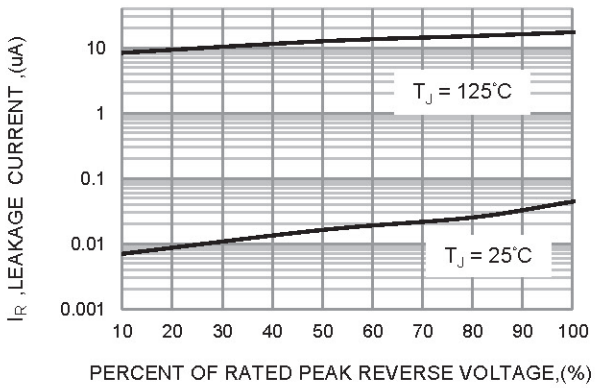
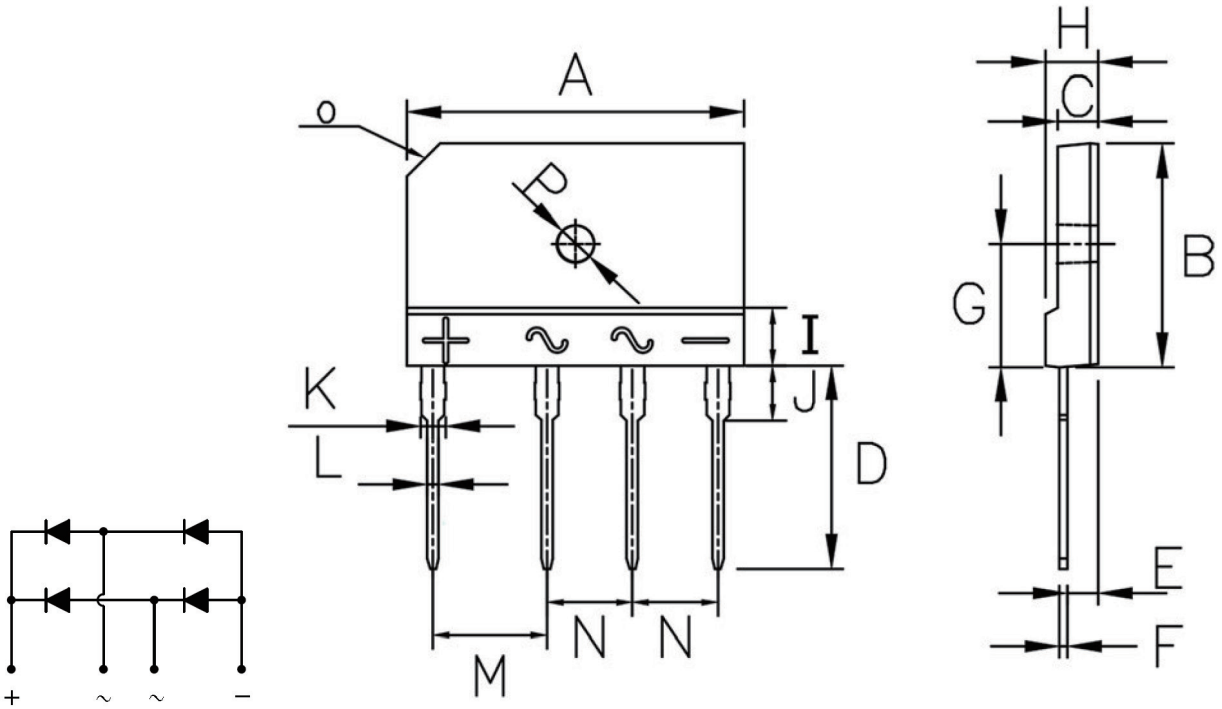


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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	7.90	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	7.40	4.40	4.80	3.80	2.00	0.90	9.80	7.30		φ3.0
mil	max	1193	799	150	709	114	31	311	189	228	165	94	45	402	303	C118	φ142
	min	1169	776	134	669	98	22	291	173	189	150	79	35	386	287		φ118

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