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

GBU10005G thru GBU1010G

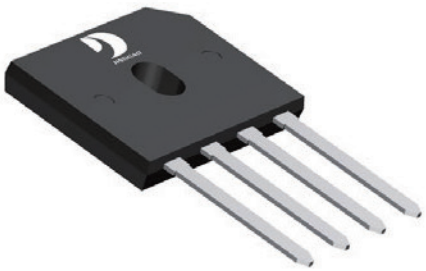
GLASS PASSIVATED BRIDGE RECTIFIERS

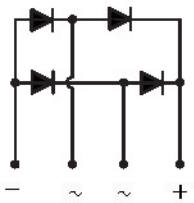
REVERSE VOLTAGE - **50** to **1000** Volts
FORWARD CURRENT - **10.0** Amperes

FEATURES

- Polarity:As marked on body
- Surge overload rating -240 amperes peak
- 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: 0.138 ounces , 3.9 grams

GBU





MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	GBU 10005G	GBU 1001G	GBU 1002G	GBU 1004G	GBU 1006G	GBU 1008G	GBU 1010G	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 (with heatsink Note 2) Rectified Current @ Tc=100℃ (without heatsink)	$I_{(AV)}$	10.0 3.0							A
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	240							A
Maximum Forward Voltage at 5.0A DC	V_F	1.0							V
Maximum DC Reverse Current $_{J=25℃}$ at Rated DC Blocking Voltage $_{J=125℃}$	I_R	5.0 500							uA
I^2t Rating for Fusing (t<8.3ms)	I^2t	200							A^2s
Typical Junction Capacitance Per Element (Note1)	C_J	86							pF
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	2.0							℃/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

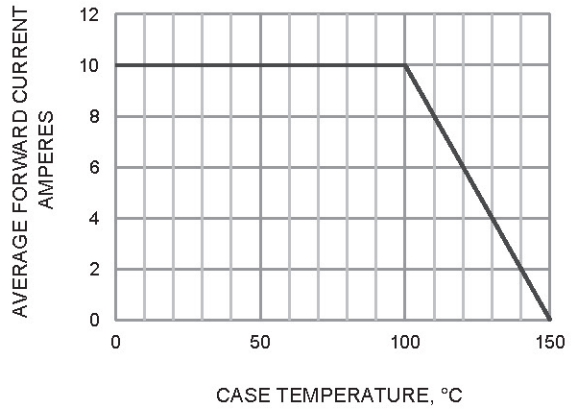


FIG.2-MAXIMUM FOWARD SURGE CURRENT

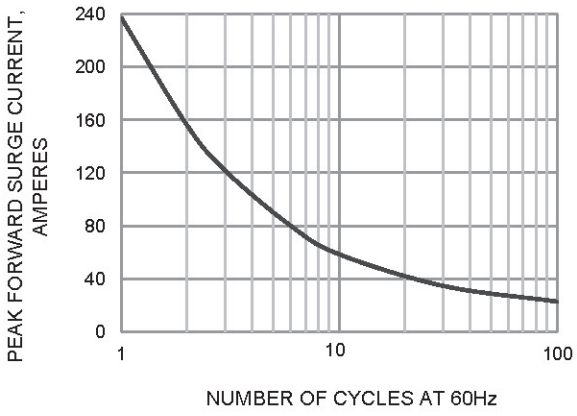


FIG.3-TYPICAL JUNCTION CAPACITANCE

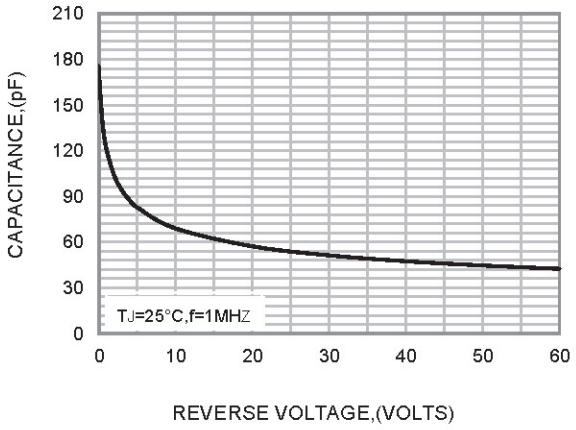


FIG.4-TYPICAL FORWARD CHARACTERISTICS

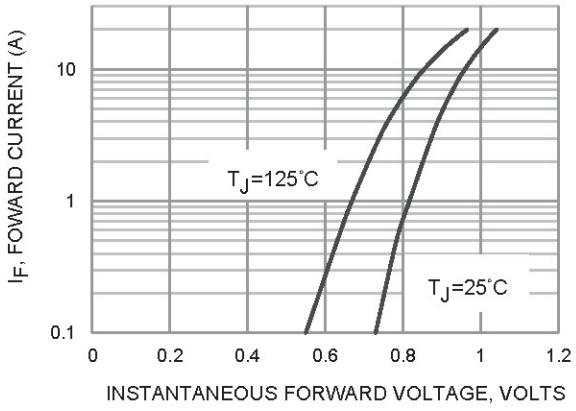
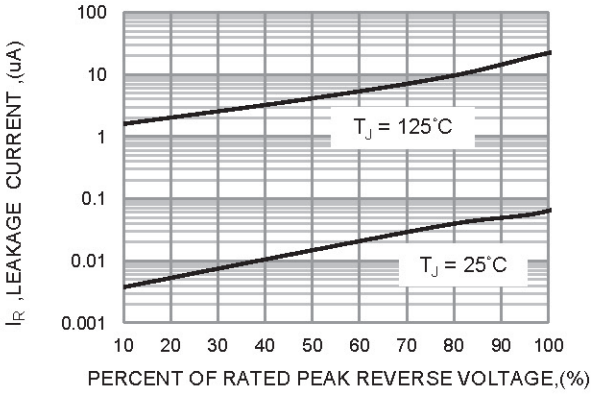
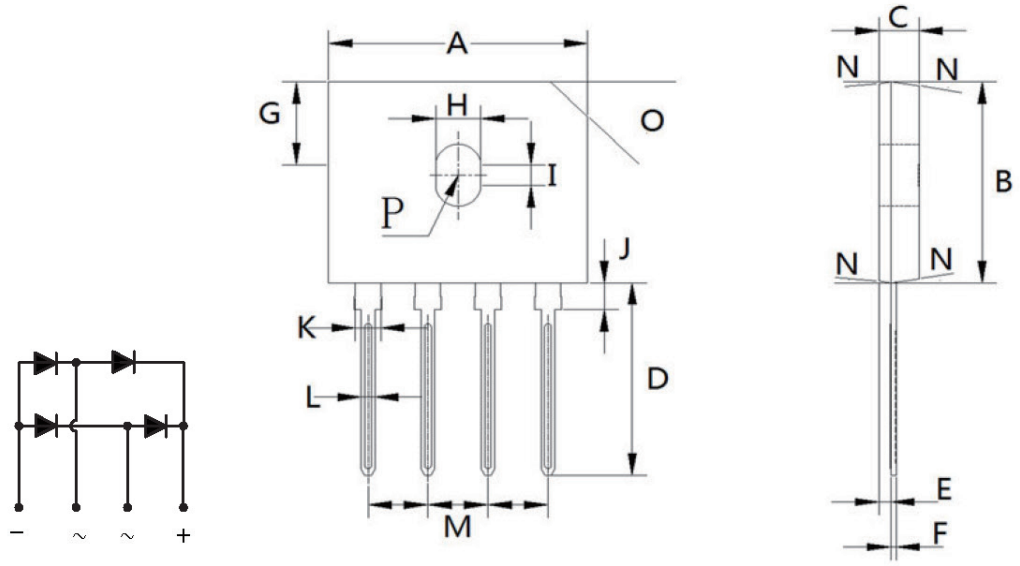


FIG.5-TYPICAL REVERSE CHARACTERISTICS



GBU Package Outline Dimensions



GBU mechanical data

UNIT		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
mm	max	22.30	18.80	3.56	18.00	1.00	0.56	7.90	4.10	2.16	2.75	2.35	1.27	5.33	7.0° TYPICAL	3.2X45°	1.90 RADIUS
	min	21.80	18.30	3.30	17.50	0.76	0.46	7.40	3.50	1.65	1.85	1.95	1.02	4.83			
mil	max	878	740	140	709	39	22	311	161	85	108	93	50	210		126*45°	75 RADIUS
	min	858	720	130	689	30	18	291	138	65	73	77	40	190			

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