

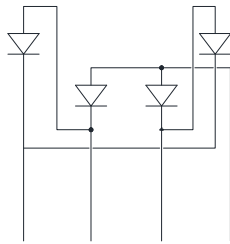
Fast Recovery Bridge Rectifiers

Features

- UL recognition, file #E230084
- Glass passivated chip junction
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for monitor, TV, printer, power supply, switching mode power supply, adapter, audio equipment, and home appliances applications.



Mechanical Data

- Package:** GBP
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity:** As marked on body

Maximum Ratings ($T_a=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	RGBP810	
Device marking code			RGBP810	
Maximum Repetitive Peak Reverse Voltage	VRRM	V	1000	
Maximum RMS Voltage	VRMS	V	700	
Maximum DC blocking Voltage	VDC	V	1000	
Average rectified output current @60Hz sine wave, R-load	With heatsink $T_c=125$	IO	A	8.0
	Without heatsink $T_a=25$			1.8
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j=25$	IFSM	A	170	
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j=25$			340	
Current squared time @1ms $t<8.3ms$ $T_j=25$ Rating of per diode	I^2t	A ² s	120	
Dielectric strength @ terminals to case, AC 1 minute	Vdis	KV	2	
Storage temperature	T_{stg}		-55 ~ +150	
Junction temperature	T_j		-55 ~ +150	



RGBP810

Electrical Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	RGBP810
Maximum reverse recovery time	t_r	ns	$I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$	500
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=4.0A$	1.3
Maximum DC reverse current at rated DC blocking voltage per diode	IR	μA	$T_j=25$	5
			$T_j=125$	100
Typical junction capacitance	C_j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	48

Thermal Characteristics $T_a=25$ Unless otherwise specified

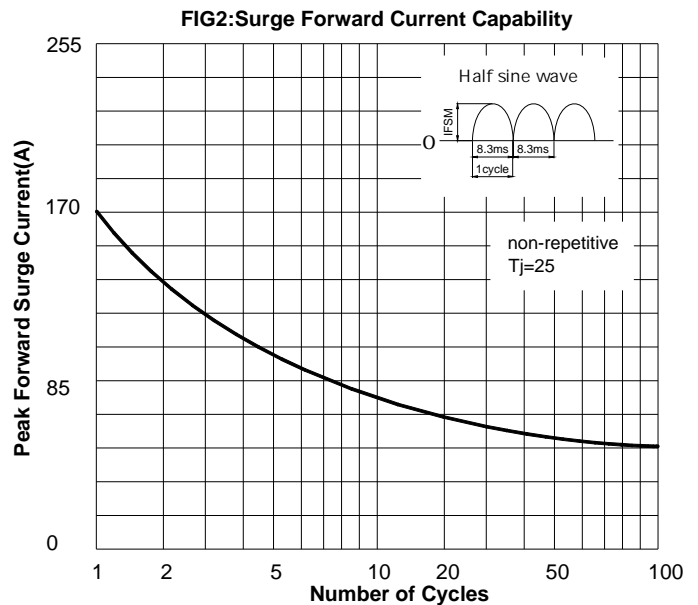
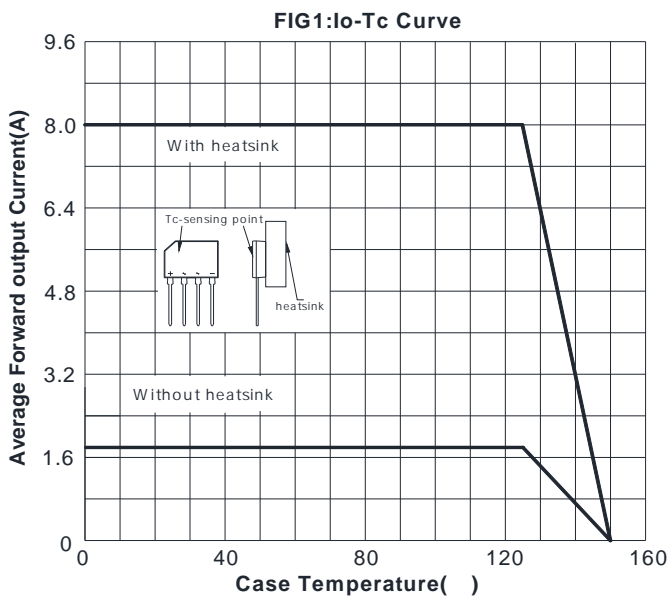
PARAMETER		SYMBOL	UNIT	RGBP810
Thermal Resistance	Between junction and ambient, Without heatsink	R J-A	/W	45.0
	Between junction and case, With heatsink	R J-C		1.5

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RGBP810	B1	Approximate 1.4	35	2100	4200	TUBE

Characteristics (Typical)





RGBP810

FIG3: Typical Forward Voltage

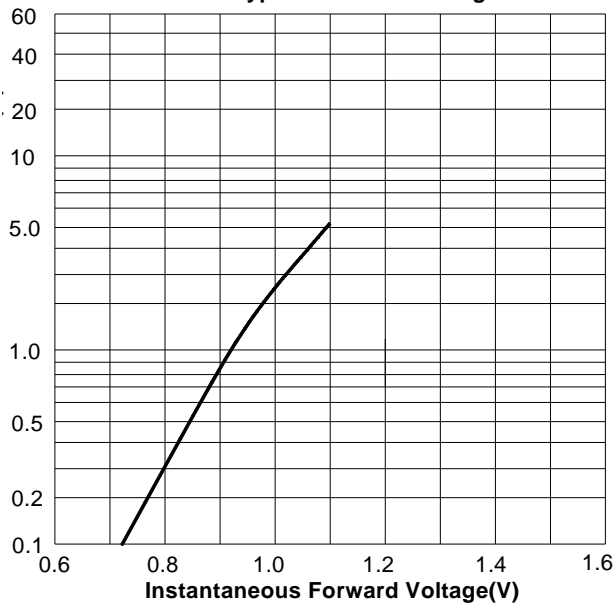
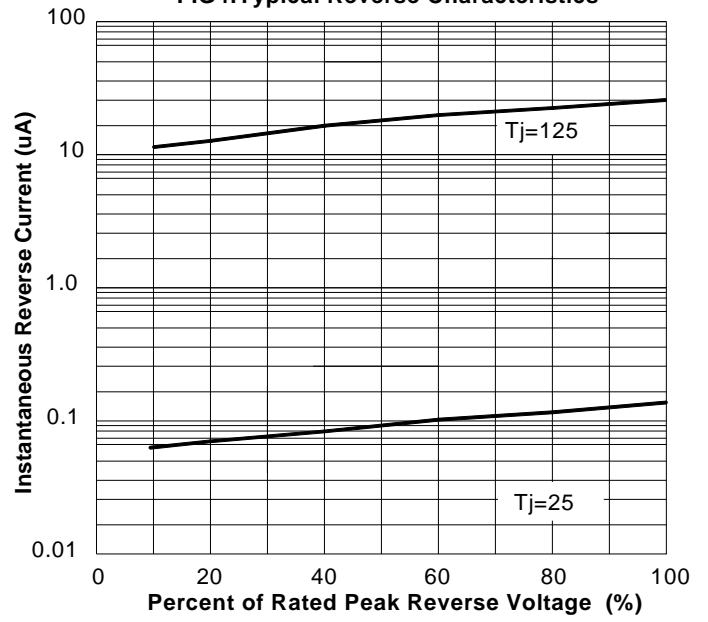
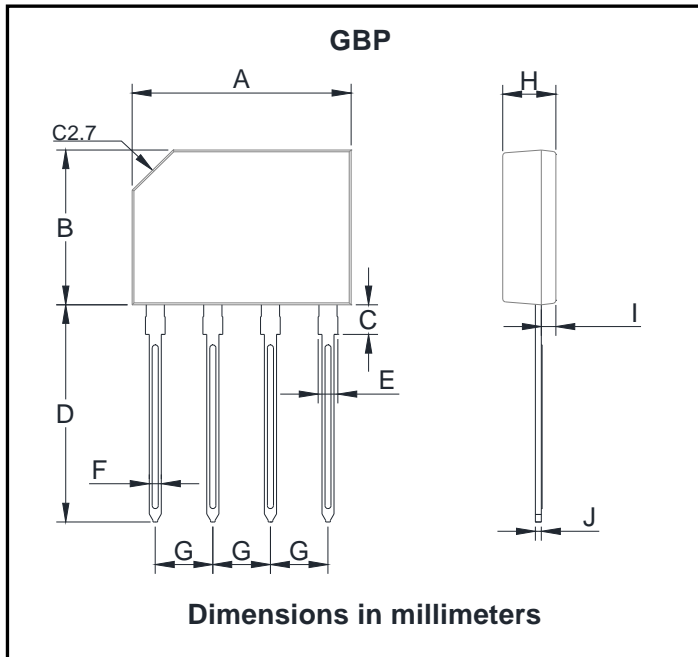


FIG4: Typical Reverse Characteristics





Outline Dimensions



GBP		
Dim	Min	Max
A	14.25	14.75
B	10.10	10.60
C	1.80	2.20
D	14.25	14.73
E	1.22	1.42
F	0.76	0.86
G	3.70	3.90
H	3.35	3.65
I	0.80	1.10
J	0.35	0.55



RGBP810

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