

GLASS PASSIVATED BRIDGE RECTIFIERS

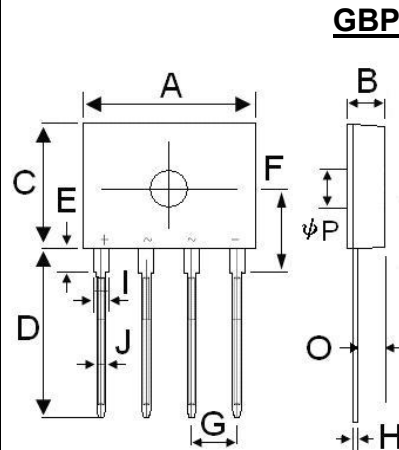
REVERSE VOLTAGE – 800 Volts
FORWARD CURRENT – 8.0 Amperes

FEATURES

- Rating to 800V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- UL recognized file # E95060

MECHANICAL DATA

- Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Polarity indicator: As marked on body
- Weight: 1.33 grams



GBP		
Dim.	Min.	Max.
A	14.2	14.7
B	2.90	3.30
C	10.1	10.7
D	13.8	14.4
E	1.80	2.20
F	6.65	7.25
G	3.71	3.91
H	0.40	0.60
I	1.20	1.40
J	0.64	0.84
O	1.80	2.40
P	3.1ψ	3.3ψ

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	800	V
Maximum average forward rectified current @ $T_A=25^\circ\text{C}$	$I_{(AV)}$	8.0 1.5	A
Peak forward surge current single half sine-wave superimposed on rated load. @ $T_J=25^\circ\text{C}$	I_{FSM}	165 330	A
$I^2 t$ rating for fusing ($t < 8.3\text{ms}$)	$I^2 t$	110	A^2S
Operation and storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITIONS	SYMBOL	MAX.	UNIT
Forward voltage	$I_F=4.0\text{ A}$ $T_J=25^\circ\text{C}$	V_F	1.05	V
Leakage current	$V_R=800\text{ V}$ $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	I_R	1.0 100	μA
Typical junction capacitance (Note1)		C_J	45	pF

THERMAL CHARACTERISTICS

THERMAL CHARACTERISTIC	SYMBOL	TYP.	UNIT
Typical thermal resistance (Note2)	R_{thJC}	3.2	$^\circ\text{C/W}$
	R_{thJL}	4.8	
	R_{thJA}	8	
Typical thermal resistance (without heatsink)	R_{thJC}	9.5	$^\circ\text{C/W}$
	R_{thJL}	24	
	R_{thJA}	28	

Note :

- (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- (2) Thermal resistance test performed in accordance with JESD-51. Device mounted on 150 mm x 150 mm x 2 mm cu plate heatsink.

REV. 3, DEC-2014, KBDG13

FIG.1- FORWARD CURRENT DERATING CURVE

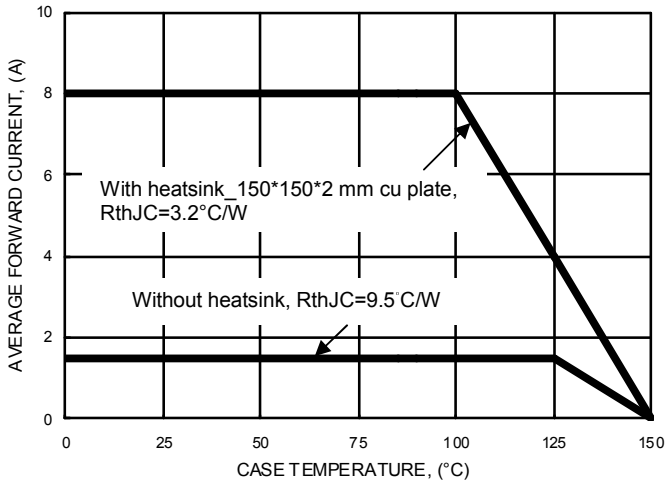


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

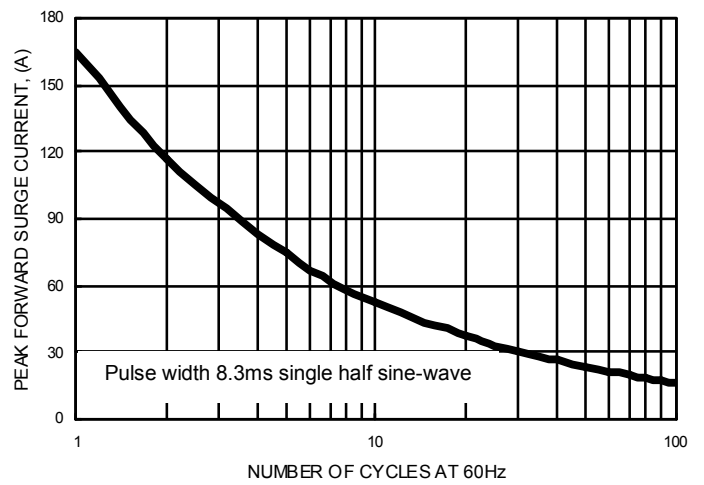


FIG.3- TYPICAL FORWARD CHARACTERISTICS

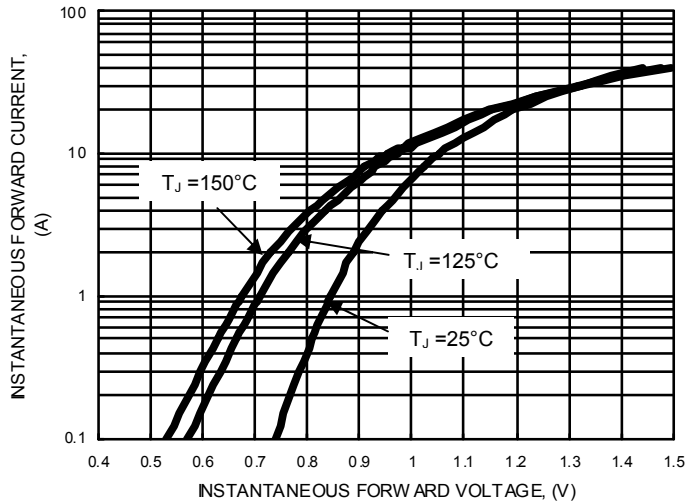


FIG.4- TYPICAL JUNCTION CAPACITANCE

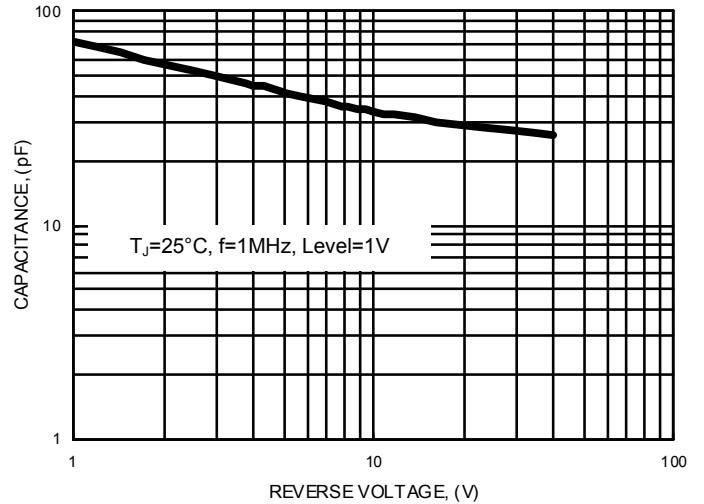
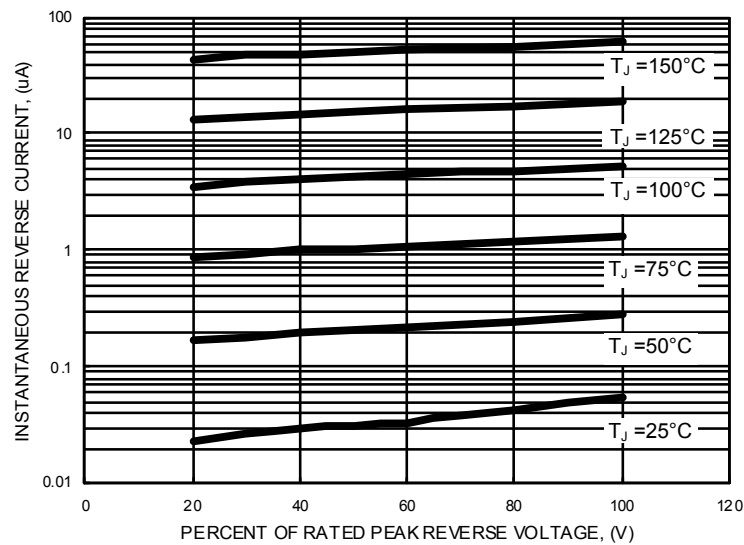


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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