

GLASS PASSIVATED BRIDGE RECTIFIERS

**REVERSE VOLTAGE – 400 to 1000 Volts
FORWARD CURRENT – 50 Ampere**

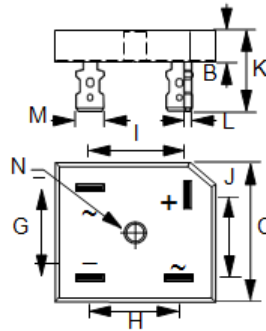
FEATURES

- Rating 400 to 1000V PRV
- Low forward voltage drop
- Solderable 0.25" FAST ON terminals
- The plastic material has UL flammability classification 94-0
- UL recognized file#E95060

MECHANICAL DATA

- Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation
- Polarity : As marked on Body
- Mounting : Hole for # 10 screw
- Weight : 0.63 ounces , 18.0 grams (terminal)
: 0.51 ounces , 14.5 grams (wire)

GBPC



GBPC		
Dim.	Min.	Max.
B	7.5	8.5
C	28.3	28.8
G	17.6	18.6
H	13.8	14.8
I	16.1	17.1
J	16.1	17.1
K	22.5	23.8
L	0.7	0.9
M	6.15	6.45
N	4.9	
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

A28BSOLUTE RATINGS

PARAMETER	SYMBOL	GBPC5004	GBPC5006	GBPC5008	GBPC5010	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	400	600	800	1000	V
Maximum DC Blocking Voltage	V_{DC}	400	600	800	1000	V
Maximum Average Forward Rectified Current @TC = 55 °C	$I_{(AV)}$	50				A
Peak Forward Surge Current 8.3ms single half sine-wave @ T _J = 25°C	I_{FSM}	450				A
Typical Junction Capacitance (Note 1)	C_J	180				pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150				°C

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITIONS	SYMBOL	MAX.	UNIT
Maximum Forward Voltage at 25A DC		V_F	1.1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _J = 25°C		I_R	10	µA

Note :

- (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- (2) Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

REV. 0, Jul-2017, KBDH04

RATING AND CHARACTERISTIC CURVES
GBPC5004 thru GBPC5010



FIG.1- FORWARD CURRENT DERATING CURVE

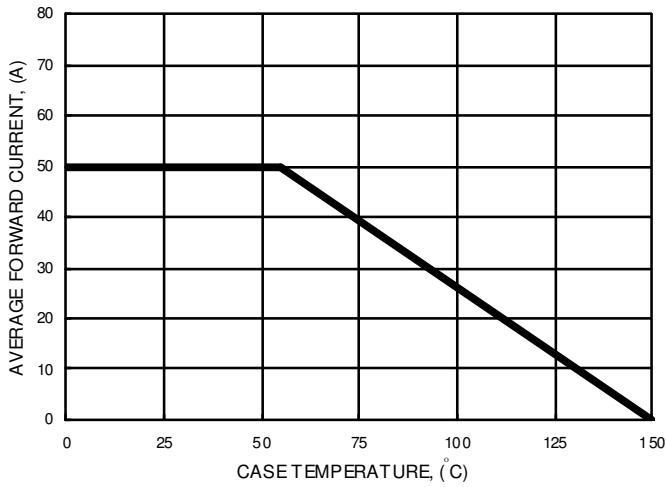


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

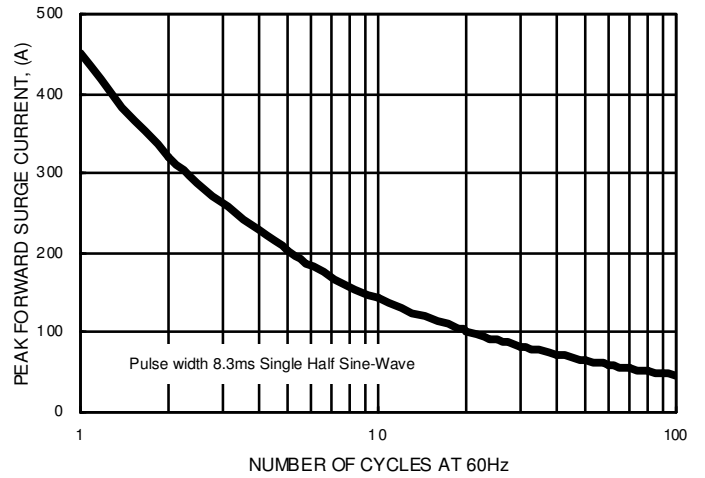


FIG.3- TYPICAL FORWARD CHARACTERISTICS

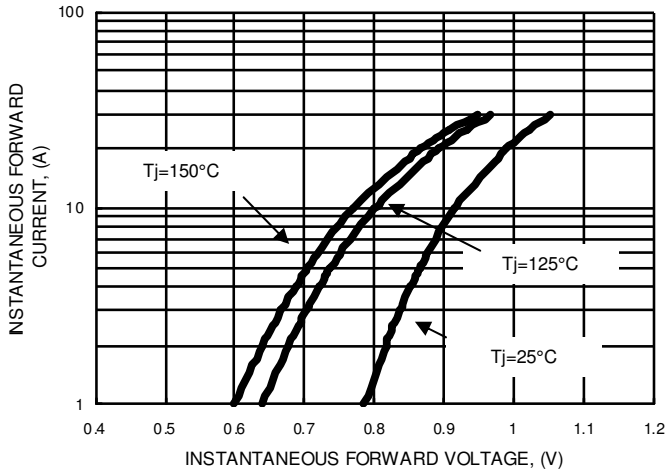


FIG.4- TYPICAL JUNCTION CAPACITANCE

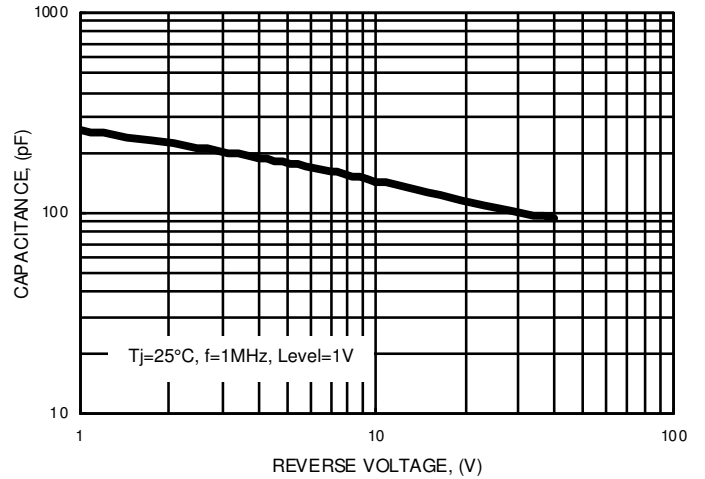
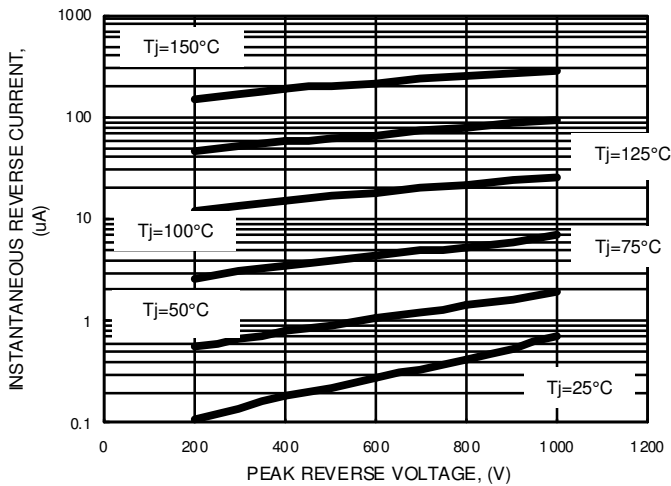


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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