Elektronische Bauelemente

4GBJ8005 ~ 4GBJ810

Voltage 50V ~ 1000V

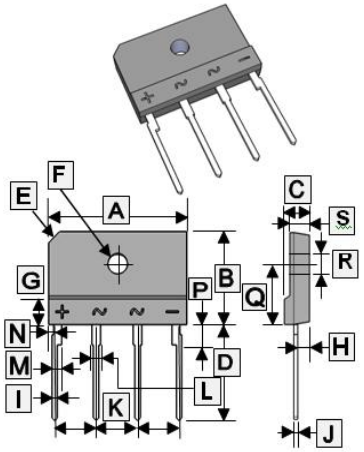
8.0 Amp Glass Passivited Bridge Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has Underwriters Laboratory flammability classification 94V-0

4GBJ



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	24.7	25.3	J	0.6	0.8
B	14.7	15.3	K	7.3	7.7
C	4.4	4.8	L	1.5	1.9
D	17.0	18.0	M	1.7	2.1
E	3.0 x 45°		N	1.05	1.45
F	3.1	3.4	P	3.3	3.8
G	4.0		Q	9.3	9.7
H	2.5	2.9	R	3.1	3.4
I	0.9	1.1	S	3.4	3.8

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

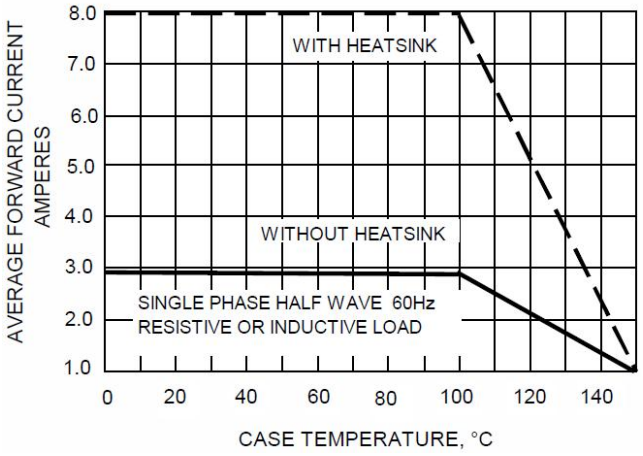
Parameter		Symbol	Part Number							Unit
			4GBJ 8005	4GBJ 801	4GBJ 802	4GBJ 804	4GBJ 806	4GBJ 808	4GBJ 810	
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heat sink) [2]		$I_{(AV)}$	8							A
Rectified Current @T_C=100°C (without heat sink)			2.9							
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)		I_{FSM}	160							A
Maximum Forward Voltage @ 4A DC		V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_J=25°C	I_R	10							μA
	T_J=125°C		500							
I^2t Rating for Fusing (t<8.3ms)		I^2t	120							A^2s
Typical Junction Capacitance Per Element [1]		C_J	55							pF
Typical Thermal Resistance		$R_{\theta JC}$	1.8							°C/W
Operating and Storage temperature range		T_J,T_{STG}	-55~150							°C

Notes：

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 75mm*75mm*1.6mm Cu plate heat sink.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE



FLG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

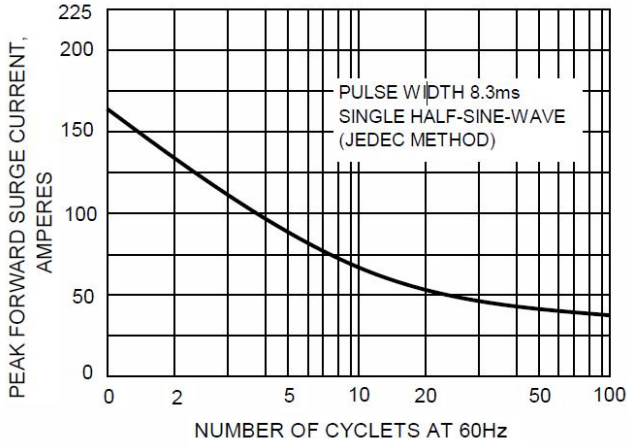


FIG.3-TYPICAL JUNCTION CAPACITANCE

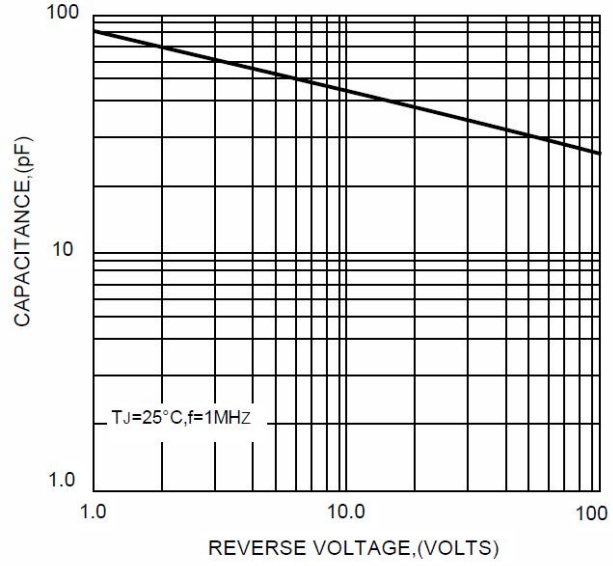


FIG.4-TYPICAL FORWARD CHARACTERISTICS

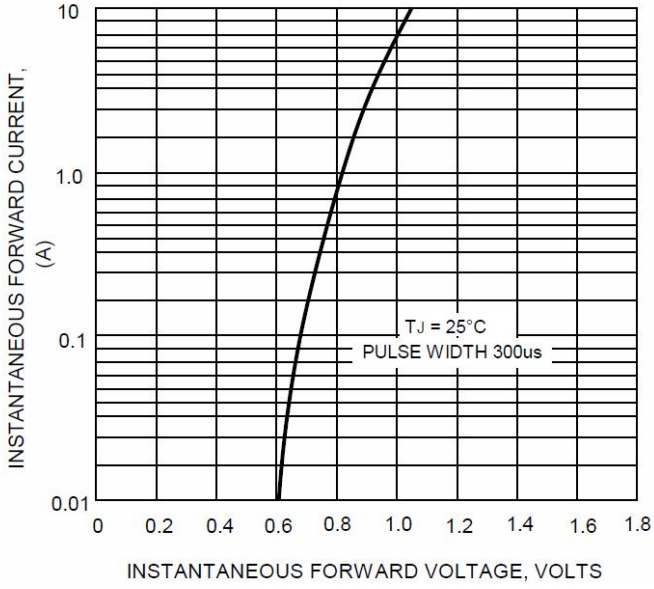


FIG.5-TYPICAL REVERSE CHARACTERISTICS

