Elektronische Bauelemente

GBJ25005 ~ GBJ2510

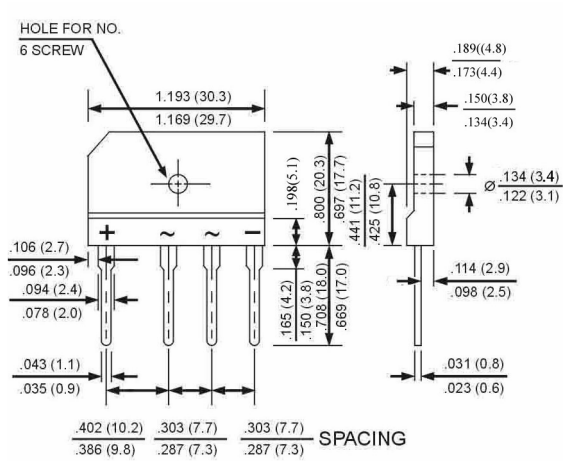
VOLTAGE 50V ~ 1000V

25.0 AMP Glass Passivated Bridge Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen-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 UL flammability classification 94V-0
- Mounting position: Any



Dimensions in inches and (millimeters)

●MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25 ℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load,
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBJ25005	GBJ2501	GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ2510	UNITS
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 Note2) Rectified Current @ T_C=100℃(without heatsink)	$I_{(AV)}$	25.0 4.2							A
Peak Forward Surge Current 8.3 ms single half sine-wave super imposed on rated load (JEDEC method)	I_{FSM}	340							A
Maximum Forward Voltage at 12.5A	V_F	1.1							V
Maximum DC Reverse Current Ta=25 ℃ at Rated DC Blocking Voltage Ta=125 ℃	I_R	10 500							μA
I^2t Rating for fusing (t<8.3ms)	I^2t	510							A^2S
Typical Junction Capacitance per element (Note1)	C_J	85							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	0.6							℃ / W
Operating Temperature Range	T_J	- 55 ~ + 150							℃
Storage Temperature Range	T_{STG}	- 55 ~ + 150							℃

NOTES:
1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

●RATING AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

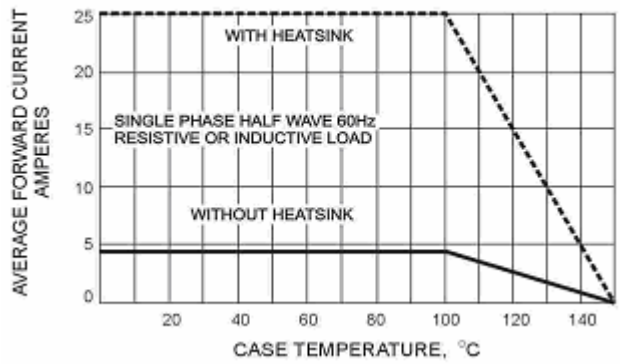


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

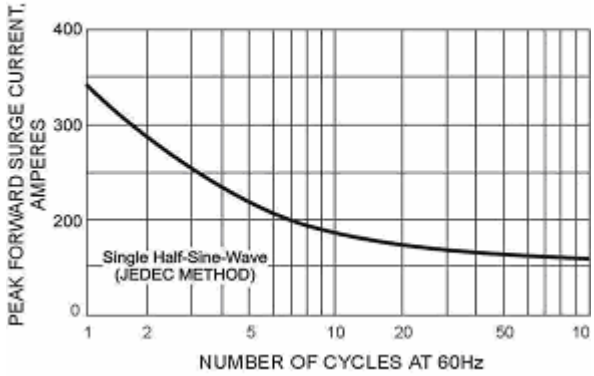


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

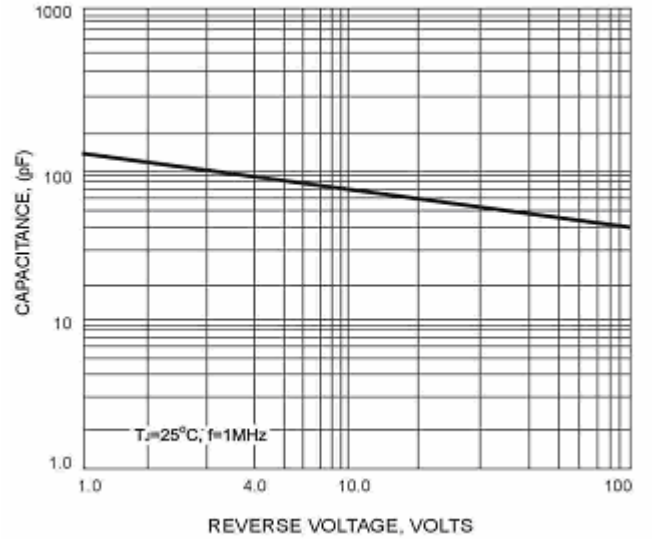


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

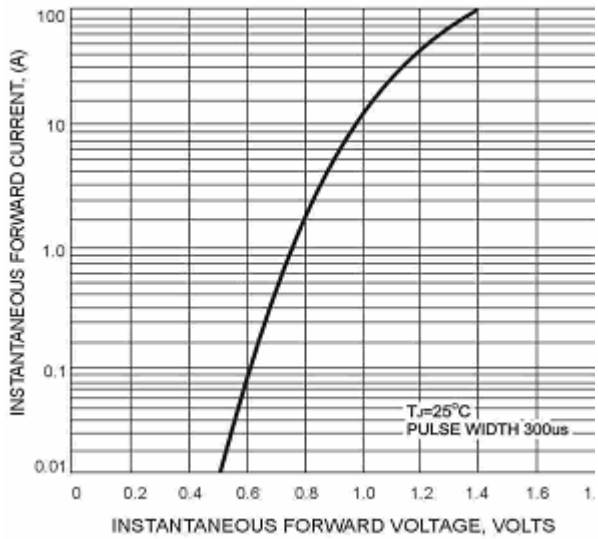


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS