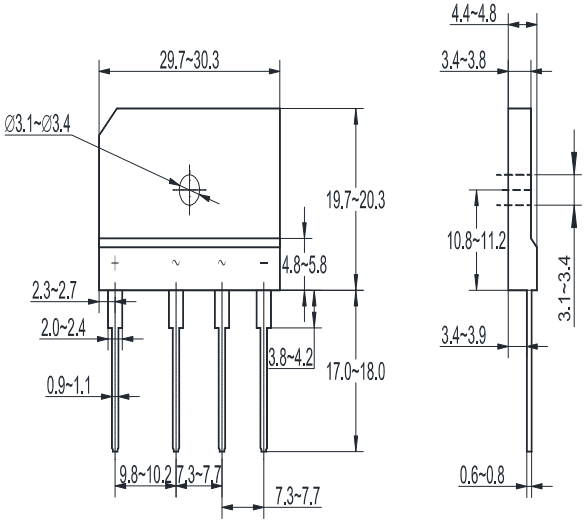
GBJ10005 THRU GBJ1010-HAF

Glass Passivated Single-phase Bridge Rectifier
Reverse Voltage: 50 to 1000 V
Forward Current: 10 A

Features
- Glass passivated chip junction
- Ideal for printed circuit board
- Low reverse leakage current
- Low forward voltage drop
- High surge current capability
- Halogen and Antimony Free(HAF), RoHS compliant

Mechanical data
- Case: Molded plastic, GBJ
- Epoxy: UL 94V-0 rate flame retardant
- Mounting Position: Any

GBJ



Dimensions in inches and (millimeters)

Absolute Maximum Ratings and Characteristics
Ratings at 25℃ ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	GBJ 10005	GBJ 1001	GBJ 1002	GBJ 1004	GBJ 1006	GBJ 1008	GBJ 1010	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 Rectified Current with Heatsink at T_C = 100℃	$I_{(AV)}$	10							A
Peak Forward Surge Current, 8.3 ms SingleHalf-Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	170							A
Current Squared Time at 1 ms ≤ t ≤ 8.3 ms	I^2t	120							A^2S
Maximum Forward Voltage at 5 A DC	V_F	1.1							V
Maximum Reverse Current at Rated T_A = 25℃ DC Blocking Voltage T_A = 125℃	I_R	10 500							μA
Typical Thermal Resistance, without heatsink	$R_{\theta JA}$	25							℃/W
Typical Thermal Resistance, with heatsink	$R_{\theta JC}$	2.3							℃/W
Operating and Storage Temperature Range	T_J, T_{Stg}	- 55 to + 150							℃

FIG1:Io-Tc Curve

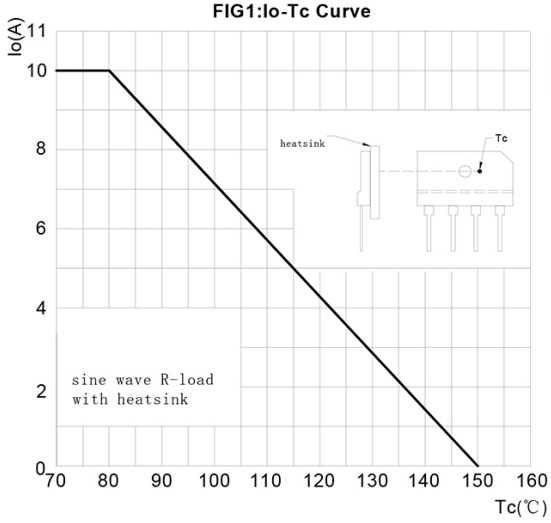


FIG2:Surge Forward Current Capadility

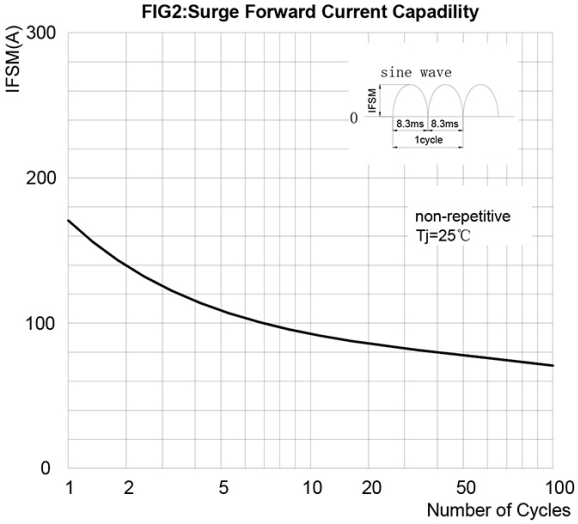


FIG3: Forward Voltage

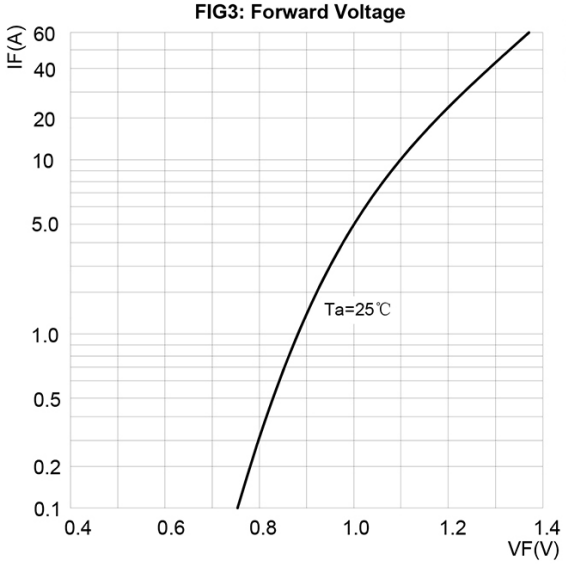


FIG4:Typical Reverse Characteristics