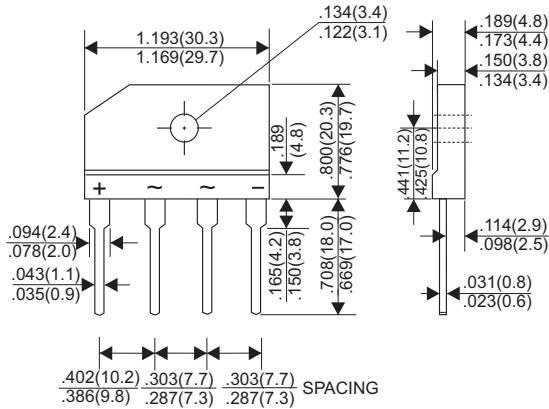




GBJ2501 THRU GBJ2507

SINGLE PHASE BRIDGE RECTIFIERS
Reverse Voltage - 50 to 1000 Volts Forward Current - 25.0 Ampere

GBJ



Dimensions in inches and (millimeters)

FEATURES

- * Glass Passivated Die Construction
- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability

MECHANICAL DATA

- * Polarity: Color band denotes cathode end
- * Mounting position: Any

Applications

- * General purpose use in AC/DC bridge full wave rectification, for power supply, industrial automation applications, etc

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, derate current by 20%.

TYPE NUMBER	GBJ2501	GBJ2502	GBJ2503	GBJ2504	GBJ2505	GBJ2506	GBJ2507	UNITS	
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
Maximum Average Forward (with heatsink Note 2)								25.0	A
.375"(9.5mm) Lead Length at Tc=100°C (With heatsink)								4.2	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								350	A
Maximum Forward Voltage Drop per Bridge Element at 12.5A D.C.								1.05	V
Maximum DC Reverse Current Ta=25°C								10	μA
at Rated DC Blocking Voltage Ta=125°C								500	μA
Typical Junction Capacitance (Note 1)								85	PF
Typical Thermal Resistance Rθjc (Note 2)								0.6	°C/W
Operating Temperature Range, Tj								-55 — +150	°C
Storage Temperature Range, Tstg								-55 — +150	°C

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance from Junction to Case with device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES (GBJ2501 THRU GBJ2507)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

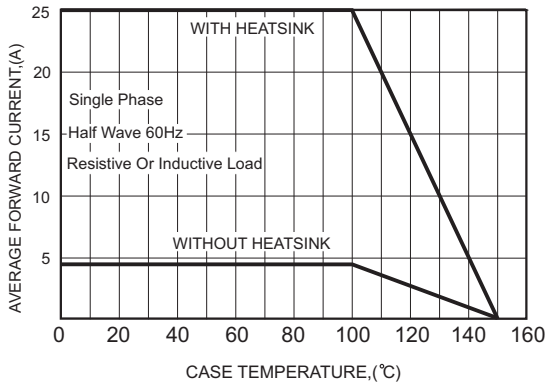


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

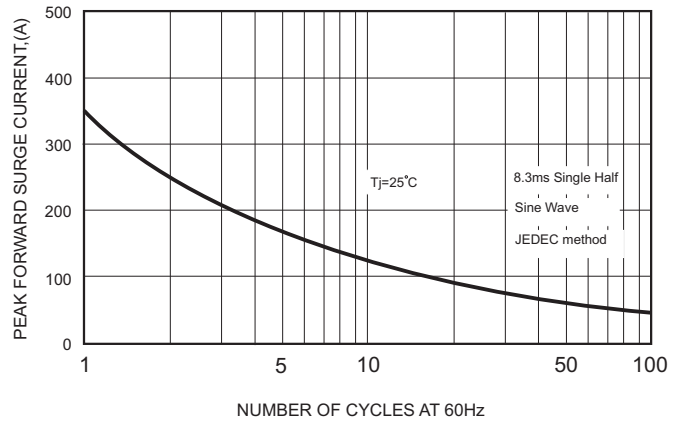


FIG.3-TYPICAL FORWARD CHARACTERISTICS

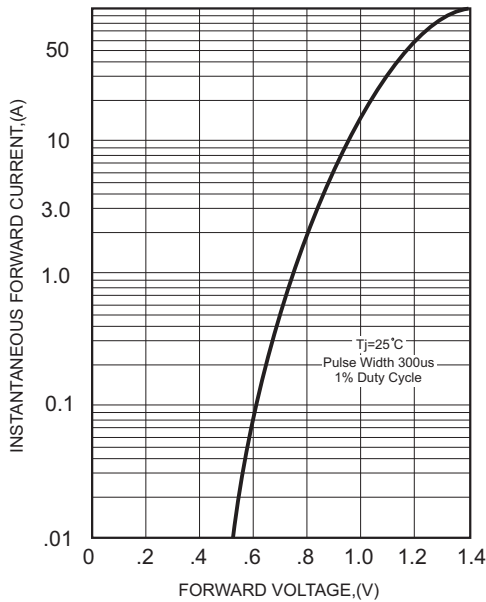


FIG.4-TYPICAL REVERSE CHARACTERISTICS

