

GBJ2500 - GBJ2510

SILICON BRIDGE RECTIFIERS

PRV : 50 - 1000 Volts

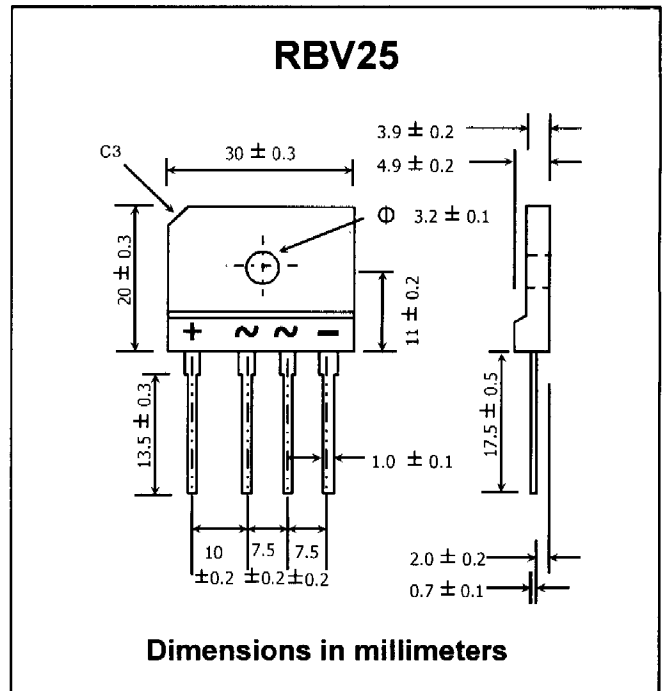
I_o : 25 Amperes

FEATURES :

- * Glass Passivated Die Construction
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * High case dielectric strength of 2000 V_{AC} @1 Sec
- * High current capability
- * Very good heat dissipation
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : Reliable low cost construction utilizing molded plastic technique
- * Epoxy : UL94V-O rate flame retardant
- * Terminals : Plated lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Polarity symbols marked on case
- * Mounting position : Any
- * Weight : 8.17 grams (Approximaly)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	GBJ 2500	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	UNIT
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 Current T _c = 100 °C	I _{F(AV)}	25							A
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	300							A
Current Squared Time at t < 8.3 ms.	I ² t	510							A ² S
Maximum Forward Voltage per Diode at I _F = 12.5 A	V _F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _a = 25 °C	I _R							μA
	T _a = 100 °C	I _{R(H)}							μA
Thermal Resistance, Junction to Case	R _{θJC}	0.6							°C/W
Operating Junction Temperature Range	T _J	- 40 to + 150							°C
Storage Temperature Range	T _{STG}	- 40 to + 150							°C

Note : (1) Thermal resistance from junction to case per element. Unit mounted on 220 x 220 x 1.6mm aluminum plate heat sink.

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RATING AND CHARACTERISTIC CURVES (GBJ2500 - GBJ2510)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

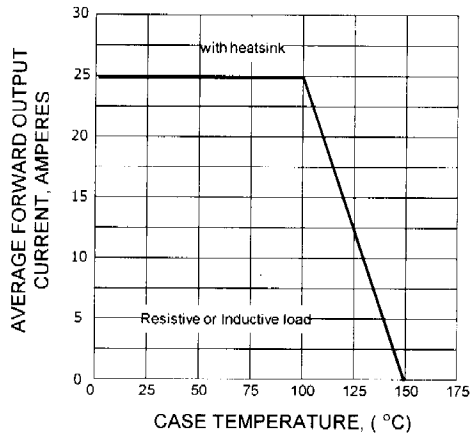


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

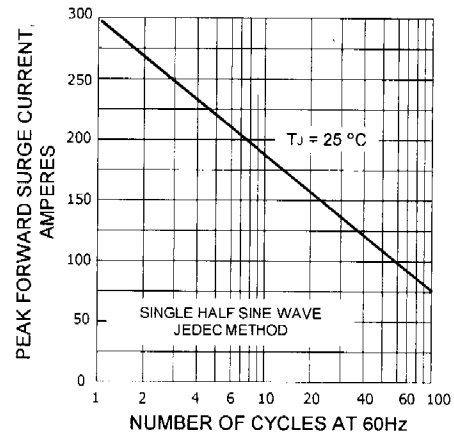


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

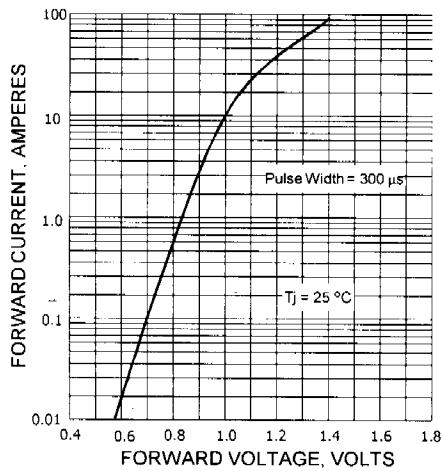


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

