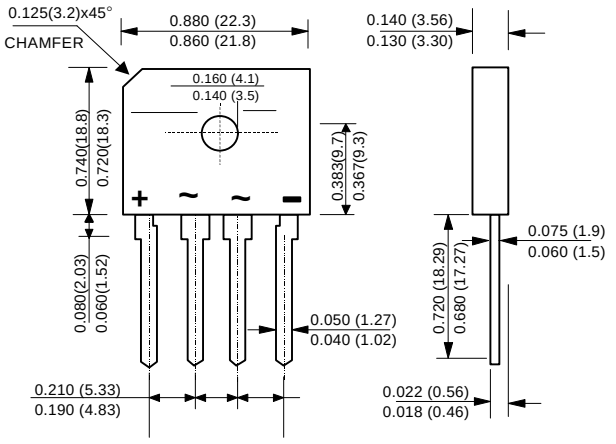
Certificate Number: Q10561 Certificate Number: E17276

GBU4A ~ GBU4M

SILICON BRIDGE RECTIFIERS

PRV : 50 - 1000 Volts
Io : 4.0 Amperes



Dimensions in inches and (millimeters)

FEATURES :

* High current capability
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Ideal for printed circuit board
* Very good heat dissipation
* Pb / RoHS Free

MECHANICAL DATA :

* Case : Reliable low cost construction utilizing molded plastic technique
* Terminals : Plated lead solderable per MIL-STD-705, Method 2026
* Polarity : Polarity symbols marked on case
* Mounting position : Any
* Weight : 4.0 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

RATING	SYMBOL	GBU 4A	GBU 4B	GBU 4D	GBU 4G	GBU 4J	GBU 4K	GBU 4M	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_R	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current Tc = 100°C	$I_{F(AV)}$	4.0							A
Maximum Peak Forward Surge Current (50 Hz, Half-cycle, Sinwave, Single Shot)	I_{FSM}	80							A
Maximum Instantaneous Forward Voltage drop per leg at I_F = 4.0 A	V_F	1.0							V
Maximum DC Reverse Current Tj = 25 °C	I_R	5.0							µA
at Rated DC Blocking Voltage Tj = 100 °C	$I_{R(H)}$	500							µA
Typical junction Capacitance per leg (Note 3)	Cj	101				46			pF
Typical Thermal Resistance, Junction to Case (Note 1)	RθJC	2.5							°C/W
Typical Thermal Resistance, Junction to Ambient (Note 2)	RθJA	22							°C/W
Operating Junction and Storage Temperature Range	Tj , T_{STG}	- 55 to + 150							°C

Notes : 1. Unit case mounted on 1.6"x1.6"x0.06" THK (4.0x4.0x0.15cm) Al. Plate.
2. Units mounted on P.C. Board with 0.5"x0.5" (12mmx15mm) copper pads and 0.375"(9.5mm) lead lengths.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (GBU4A THRU GBU4M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

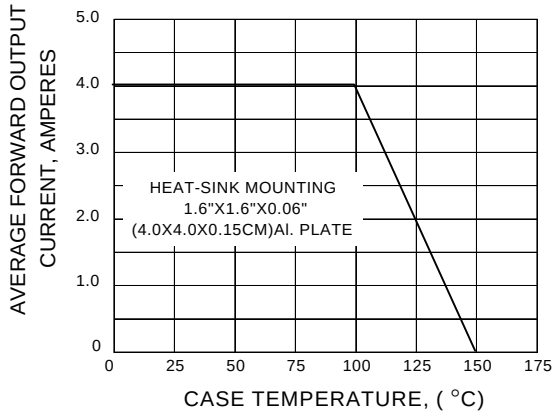


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

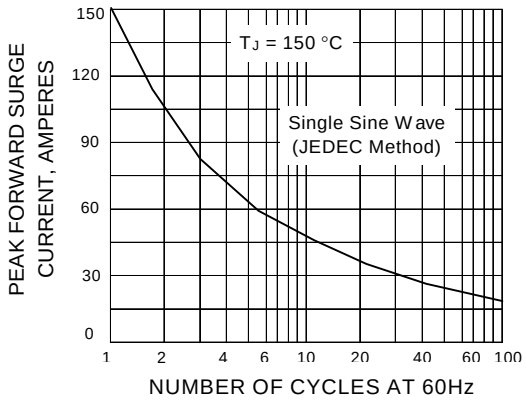


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

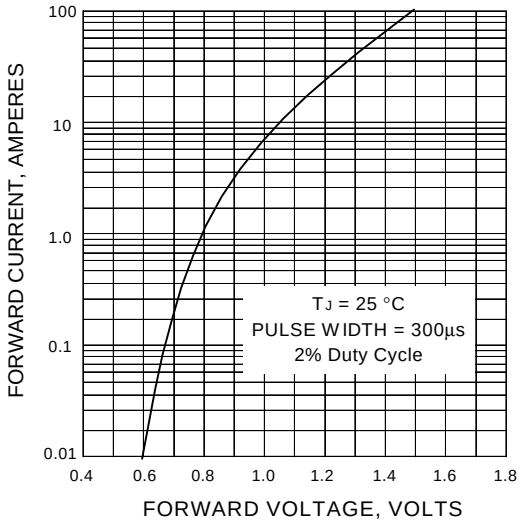


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT