

SINGLE-PHASE SILICON BRIDGE RECTIFIER
VOLTAGE RANGE 50 to 1000 Volts CURRENT 10 Amperes

FEATURES

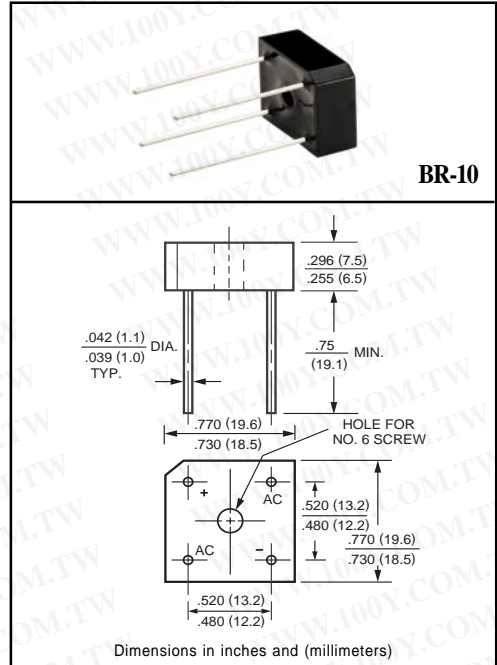
- * Surge overload rating: 200 amperes peak
- * Low forward voltage drop

MECHANICAL DATA

- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: Mil-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 7.86 grams
- * Mounting: Hole thru for # 6 screw

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.



MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	BR1005	BR101	BR102	BR104	BR106	BR108	BR1010	UNITS	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Tc = 50°C Rectified Output Current at: Tc = 100°C TA = 50°C	I_o	10.0				6.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}					200				Amps
Typical Thermal Resistance	$R_{\theta JA}$					28				°C/W
Typical Thermal Resistance	$R_{\theta JC}$					6.5				°C/W
Operating Temperature Range	T_J					-55 to + 150				°C
Storage Temperature Range	T_{STG}					-55 to + 150				°C

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	BR1005	BR101	BR102	BR104	BR106	BR108	BR1010	UNITS	
Maximum Forward Voltage Drop per element at 5.0A DC	V_F					1.1				Volts
Maximum Reverse Current at Rated	I_R					5.0				uAmps
DC Blocking Voltage per element						0.2				mAmps

Note: "Fully ROHS compliant", "100% Sn plating (Pb-free)".

RATING AND CHARACTERISTIC CURVES (BR1005 THRU BR1010)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

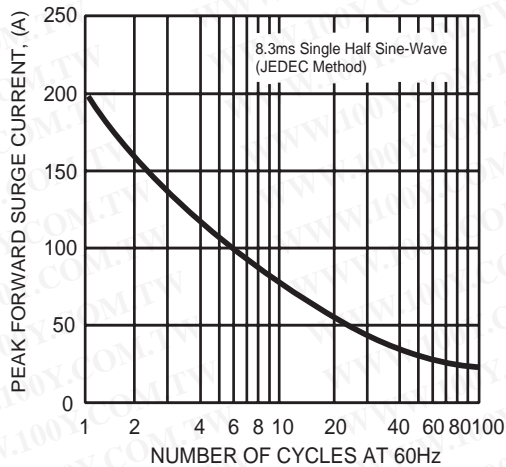
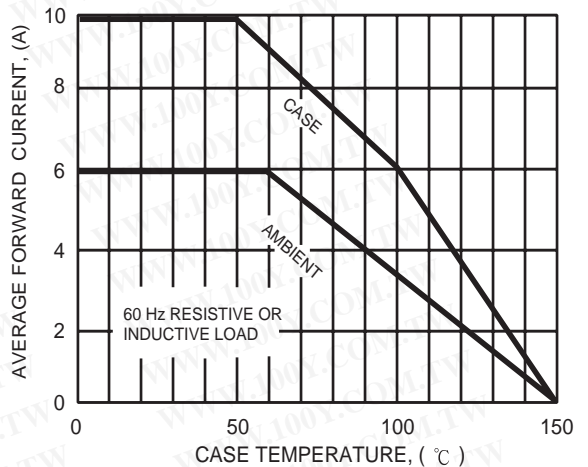


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE



勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

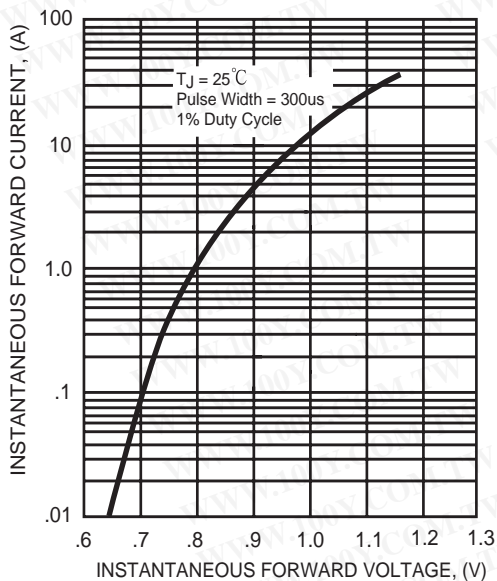


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

