

**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**

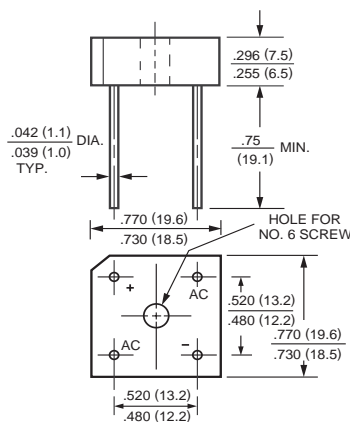
- \* UL listed the recognized component directory, file #E94233
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Lead: Mil-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 7.86 grams
- \* Mounting: Hole thru for # 6 screw

**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%.



**BR-10**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS** (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	BR1005	BR101	BR102	BR104	BR106	BR108	BR1010	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	Vdc	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Tc = 50°C Rectified Output Current at: Tc = 100°C TA = 50°C	Io	10.0							Amps
		6.0							
		6.0							
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	200							Amps
Typical Thermal Resistance	RθJA	28							°C/W
Typical Thermal Resistance	RθJC	6.5							°C/W
Operating Temperature Range	TJ	-55 to + 150							°C
Storage Temperature Range	TSTG	-55 to + 150							°C

**ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	BR1005	BR101	BR102	BR104	BR106	BR108	BR1010	UNITS
Maximum Forward Voltage Drop per element at 5.0A DC	VF	1.1							Volts
Maximum Reverse Current at Rated	IR	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

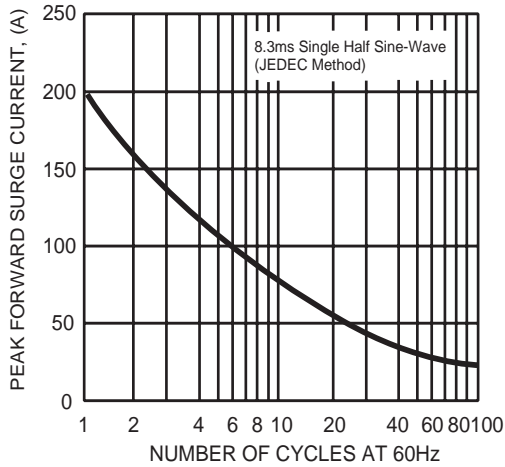


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

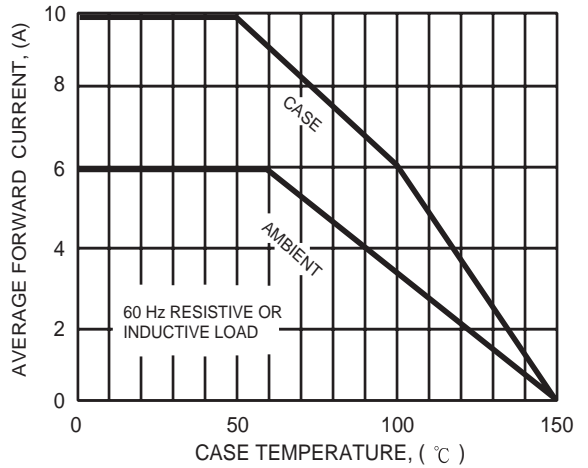


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

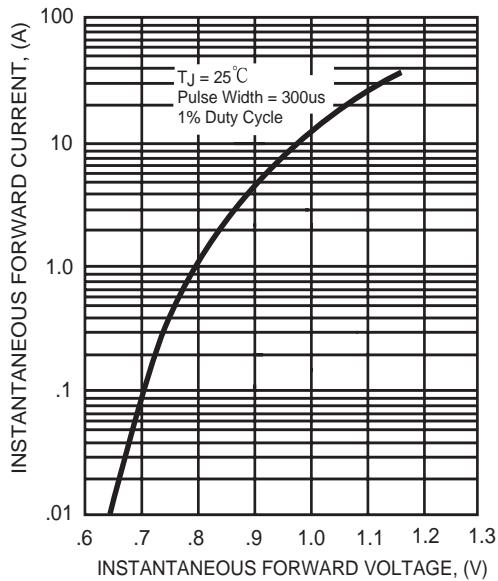


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

