

## 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

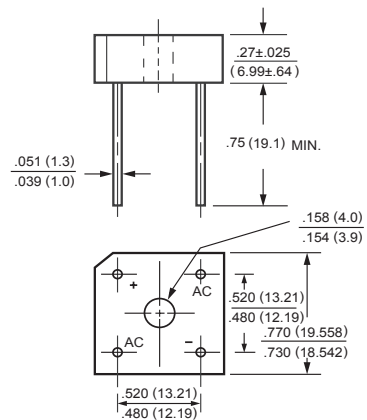
- \* UL listed the recognized component directory, file #E94233
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Lead: Mil-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 7.86 grams

### 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	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Tc = 50°C	I <sub>O</sub>	10.0							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>					200				Amps
Current Squared Time	I <sup>2</sup> t					166				A <sup>2</sup> /Sec
Operating Temperature Range	T <sub>J</sub>					-55 to + 150				°C
Storage Temperature Range	T <sub>STG</sub>					-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	V <sub>F</sub>					1.1				Volts
Maximum Reverse Current at Rated	I <sub>R</sub>					5.0				uAmps
DC Blocking Voltage per element						0.2				mAmps

- NOTES : 1. Thermal Resistance : Mounted on PCB.  
 2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".  
 3. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

# RATING AND CHARACTERISTIC CURVES ( BR1005 THRU BR1010 )

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

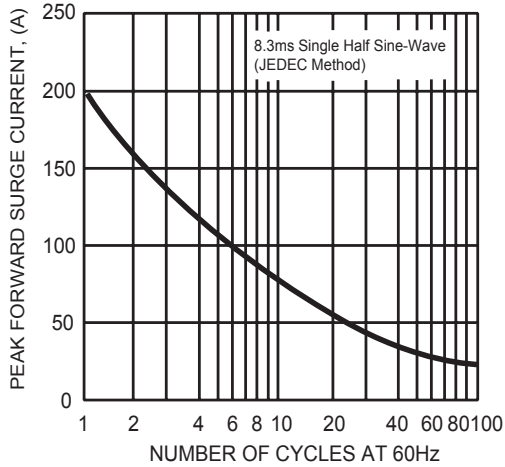


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

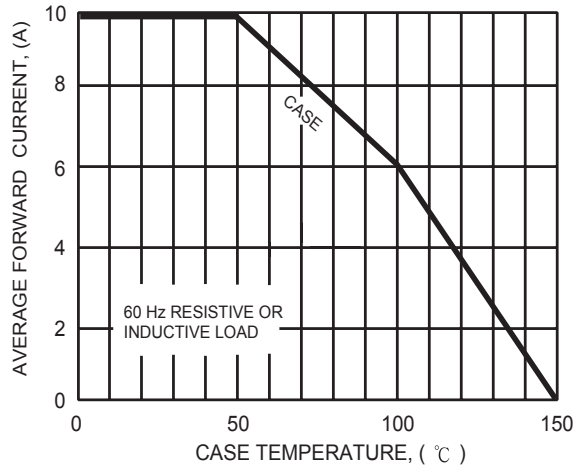


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

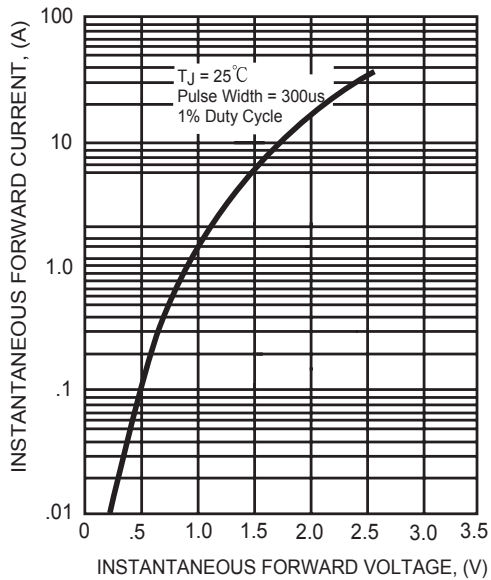
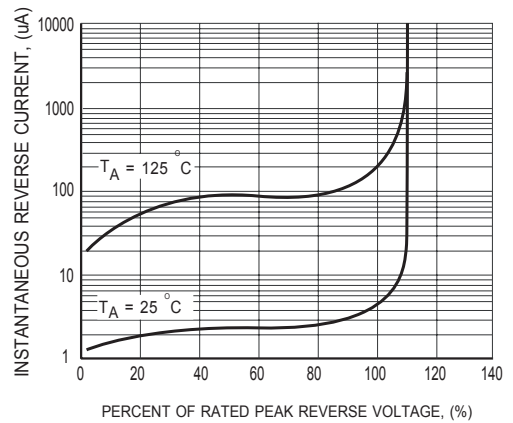


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

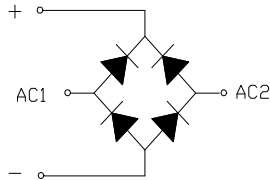




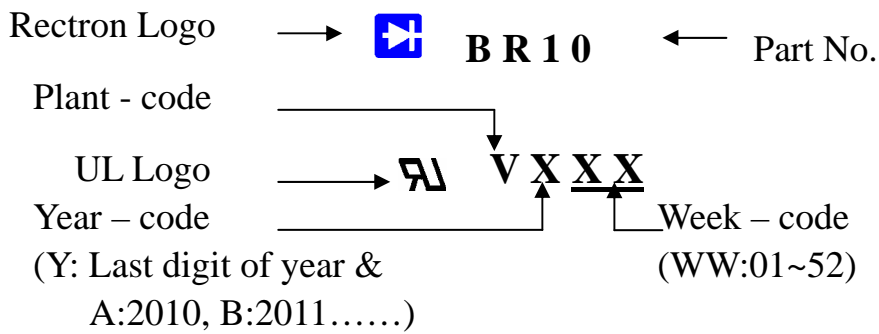
# RECTRON

## Attachment information about BR10X

### 1. Internal Circuit



### 2. Marking on the body



### 3. Items marked on the inner box and carton

#### 3.1 On the box (for -B)

**CUSTOMER**  
**TYPE**  
**LOT NO.**  
**QUANTITY**  
**Q.A.**  
**DATE**

#### 3.2 On the carton

**CUSTOMER**  
**TYPE**  
**QUANTITY**  
**LOT NO.**  
**REMARK**

## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
BR-10	-B	200	236*236*50	497*251*282	2,000	12.24