

SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 6.0 Amperes

FEATURES

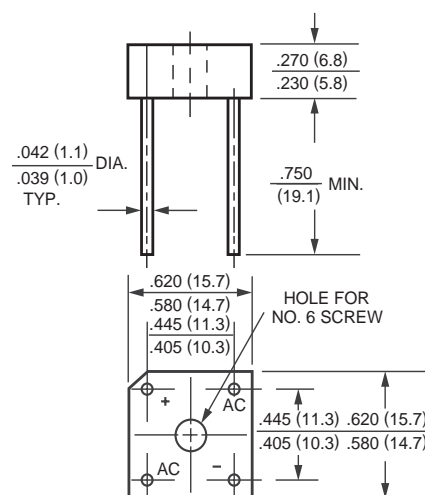
- * Surge overload rating: 125 amperes peak
- * Low forward voltage drop
- * Small size: simple installation
- * Mounting position: Any
- * Mounting: Hole thru for # 6 screw

MECHANICAL DATA

- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-O



BR-6



Dimensions in inches and (millimeters)

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 TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	BR605	BR61	BR62	BR64	BR66	BR68	BR610	UNITS	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts	
Maximum RMS Bridge Input 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 Rectified Output Current at Tc = 75°C	Io	6.0								Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	125								Amps
Typical Thermal Resistance from junction to case	RθJC	7.3								°C/W
Typical Thermal Resistance from junction to ambient	RθJA	28								
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	BR605	BR61	BR62	BR64	BR66	BR68	BR610	UNITS	
Maximum Forward Voltage Drop per element at 3.0A DC	VF	1.0								Volts
Maximum Reverse Current at Rated	IR	5.0								uAmps
DC Blocking Voltage per element									0.2	

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

2005-3

REV: A

RATING AND CHARACTERISTIC CURVES (BR605 THRU BR610)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

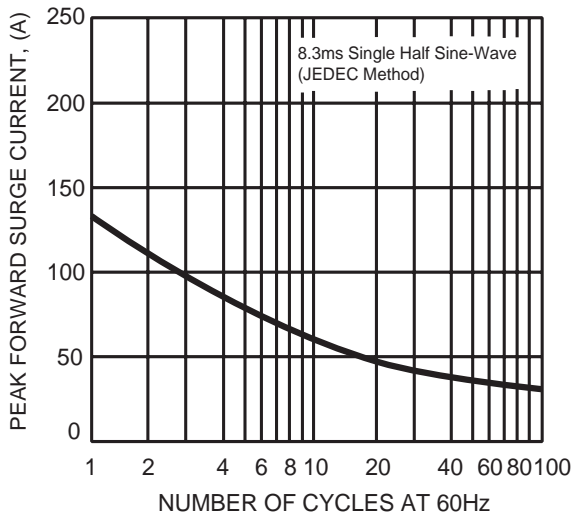


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

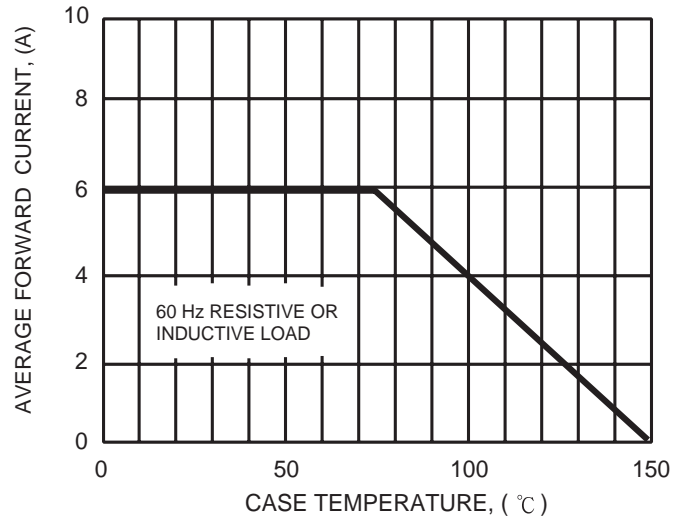


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

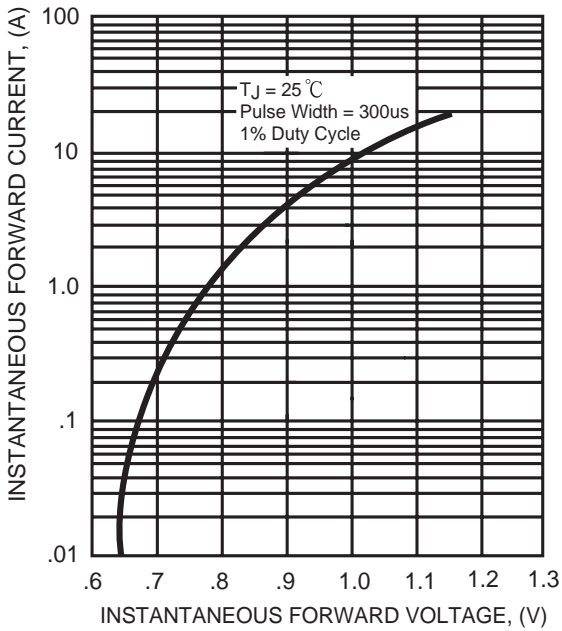


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

