

# BR3505 THRU BR3510

## SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE: 50-1000V

CURRENT: 35.0A

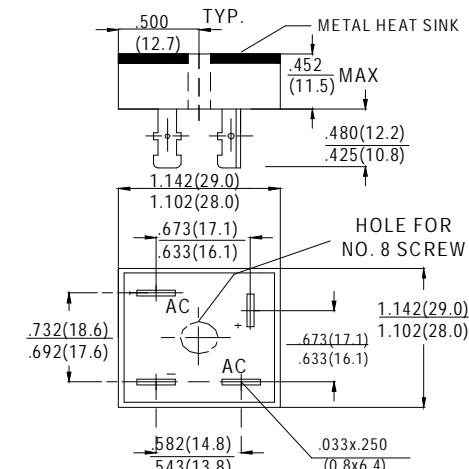
### FEATURES

- Plastic case with heatsink for Maximum Heat Dissipation
- Surge overload ratings-400 Amperes
- Low forward voltage drop

### MECHANICAL DATA

- **Case:** Metal or plastic shell with plastic encapsulation
- **Epoxy:** UL 94V-0 rate flame retardant
- **Terminals:** Plated .25"(6.35mm) Faston lugs, Solderable per MIL-STD- 202E, Method 208 guaranteed
- **Polarity:** As marked
- **Mounting:** Thru hole for 8# screw
- **Weight:** 30 grams

### BR-25



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRONICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	SYMBOL	BR3505	BR351	BR352	BR354	BR356	BR358	RB3510	units
Maximum Recurrent Peak Reverse Voltage	<b>V<sub>RRM</sub></b>	50	100	200	400	600	800	1000	<b>V</b>
Maximum RMS Bridge Input Voltage	<b>V<sub>RMS</sub></b>	35	70	140	280	420	560	700	<b>V</b>
Maximum DC Blocking Voltage	<b>V<sub>DC</sub></b>	50	100	200	400	600	800	1000	<b>V</b>
Maximum Average Forward rectified Output Current at T <sub>C</sub> =55°C	<b>I<sub>o</sub></b>				35				<b>A</b>
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	<b>I<sub>FSM</sub></b>				400				<b>A</b>
Maximum Forward Voltage Drop per element at 17.5A DC	<b>V<sub>F</sub></b>			1.1					<b>V</b>
Maximum DC Reverse Current at Rated DC Blocking Voltage per element @ T <sub>A</sub> =25°C @ T <sub>A</sub> =100°C	<b>I<sub>R</sub></b>			10					<b>μA</b>
				500					
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	<b>I<sup>2</sup>t</b>			664					<b>A<sup>2</sup>s</b>
Typical Junction Capacitance (Note 1)	<b>C<sub>J</sub></b>			300					<b>pF</b>
Typical Thermal Resistance (Note 2)	<b>R<sub>θJA</sub></b>			2.2					<b>°C/W</b>

Notes: 1. Measured at 1MHz and applied reverse voltage of 4.0 volts

2. Thermal Resistance from Junction to Case per leg