

**SINGLE-PHASE SILICON BRIDGE RECTIFIER**  
VOLTAGE RANGE 50 to 1000 Volts CURRENT 35 Amperes

**FEATURES**

- \* Superior thermal desing
- \* 400 amperes surge rating
- \* 1/4" universal faston terminal
- \* Hole thru for #8 screw

**MECHANICAL DATA**

- \* Epoxy : Device has UL flammability classification 94V-0
- \* UL listed the recongnized component director, file #94233

**DISCONTINUED-**

"This series is replaced by the MP35 series that meets to the same fit and function parameters.  
The MP35 series is preferred for PCB assembly."

**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-35**



**BR-35W**

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

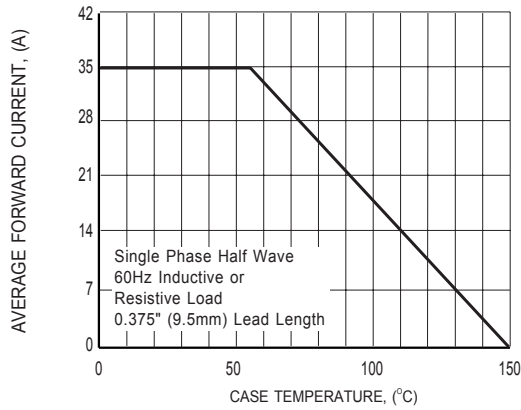
| RATINGS  | SYMBOL                            | BR3505       | BR351 | BR352 | BR354 | BR356 | BR358 | BR3510 | UNITS |
|--|-----------------------------------|--------------|-------|-------|-------|-------|-------|--------|-------|
| Maximum Recurrent Peak Reverse Voltage   | V <sub>RRM</sub>                  | 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 Rectified Current<br>at T <sub>C</sub> = 55°C                                | I <sub>O</sub>                    | 35.0         |       |       |       |       |       |        | Amps  |
| Peak Forward Surge Current 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | I <sub>FSM</sub>                  | 400          |       |       |       |       |       |        | Amps  |
| Typical Thermal Resistance (Note 2)  | R <sub>θJC</sub>                  | 1.4          |       |       |       |       |       |        | °C/W  |
|  | R <sub>θJA</sub>                  | 22           |       |       |       |       |       |        |       |
| Operating and Storage Temperature Range  | T <sub>J</sub> , T <sub>STG</sub> | -55 to + 150 |       |       |       |       |       |        | °C    |

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

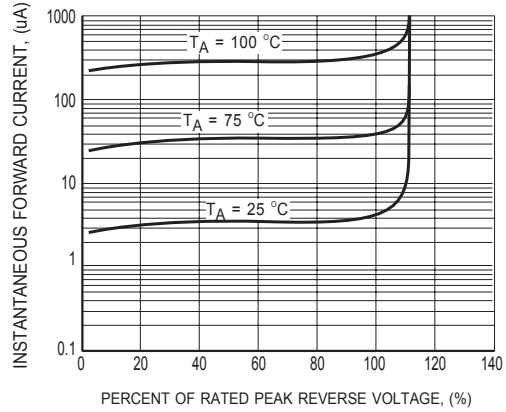
| CHARACTERISTICS  | SYMBOL                  | BR3505 | BR351 | BR352 | BR354 | BR356 | BR358 | BR3510 | UNITS |
|--|-------------------------|--------|-------|-------|-------|-------|-------|--------|-------|
| Maximum Instantaneous Forward Voltage at 17.5ADC           | V <sub>F</sub>          | 1.1    |       |       |       |       |       |        | Volts |
| Maximum DC Reverse Current<br>at Rated DC Blocking Voltage | @T <sub>A</sub> = 25°C  | 5.0    |       |       |       |       |       |        | uAmps |
|  | @T <sub>A</sub> = 100°C | 500    |       |       |       |       |       |        |       |

- NOTES : 1. Suffix "W" for wire type.  
2. Typical Thermal Resistance: Heat-sink case mounted.  
3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

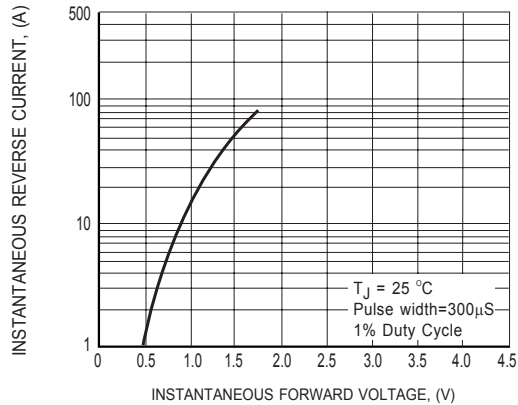
# RATING AND CHARACTERISTICS CURVES ( BR3505 THRU BR3510 )



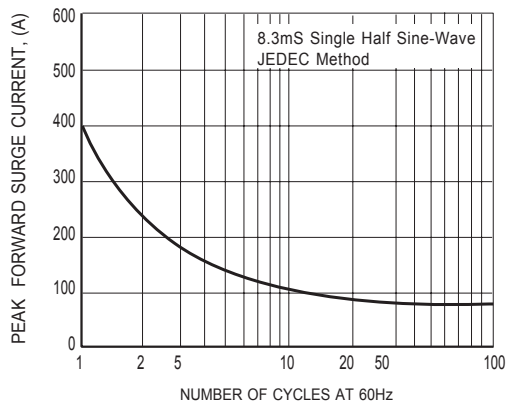
**FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE**



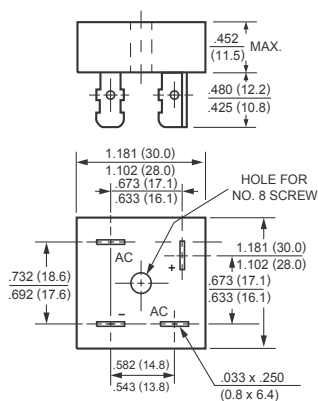
**FIG.2 TYPICAL REVERSE CHARACTERISTICS**



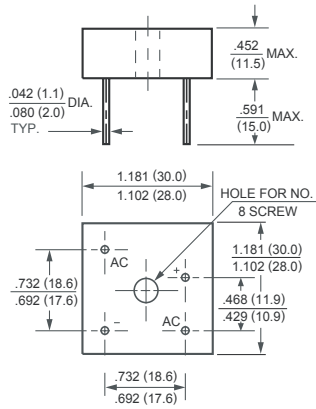
**FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**BR-35**



**BR-35W**

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