



# BR3505-BR3510

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



**BR-35**



**BR-35W**

## Maximum Ratings and Electrical Characteristics

Rating 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	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 Bridge Input 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 Output Current 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 superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	400							Amps
Operating and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to + 175							°C

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

CHARACTERISTICS	SYMBOL	BR3505	BR351	BR352	BR354	BR356	BR358	BR3510	UNITS
Maximum Forward Voltage Drop per element at 17.5A DC	V <sub>F</sub>	1.1							Volts
Maximum Reverse Current at Rated	I <sub>R</sub>	10							uAmps
DC Blocking Voltage per element		0.5							mAmps

NOTE: Suffix "W" for wire type

2001-6



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### RATING AND CHARACTERISTIC CURVES ( BR3505 THRU BR3510 )

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

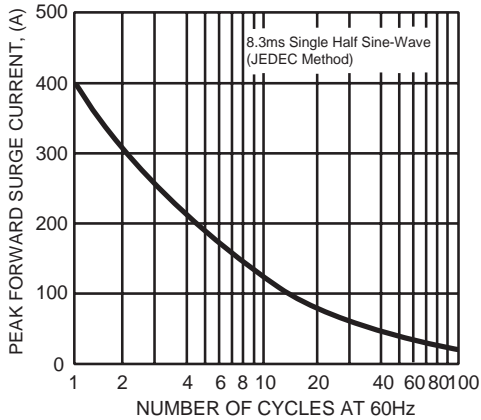


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

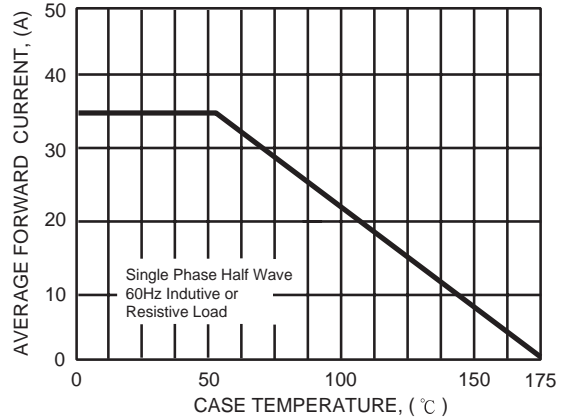


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

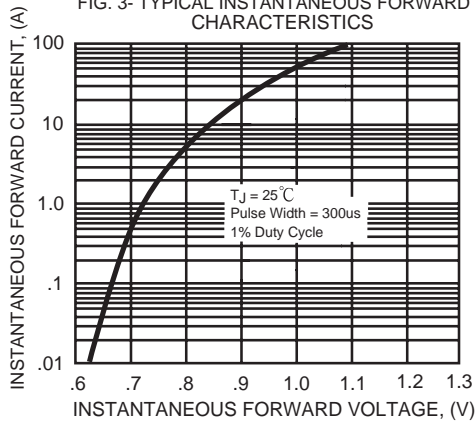
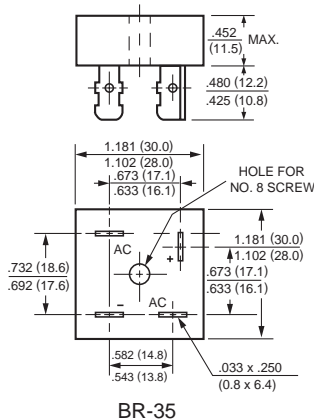
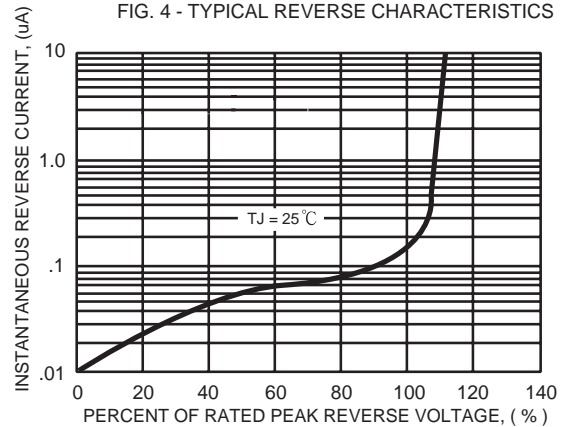
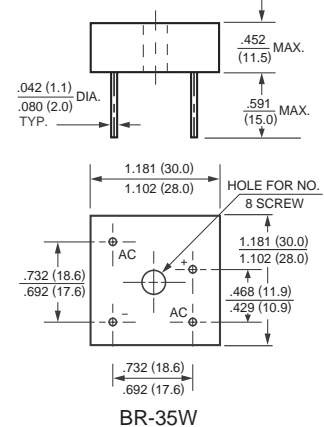


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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BR-35W