



SINGLE PHASE BRIDGE RECTIFIER

BR3505 - BR3510

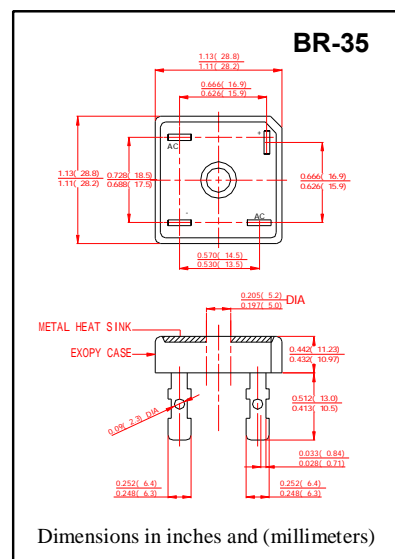
VOLTAGE RANGE - 50 to 1000 V
CURRENT - 35 A

FEATURES

- Low cost
- This series is UL recognized under component index, file number E127707
- High forward surge current capability
- Integrally molded heatsink provide very low thermal resistance
- High isolation voltage from case to leads
- High temperature soldering guaranteed: 260 °C/10 second, at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

- Case: Molded plastic body
- Terminal: Plated lead 0.25"(6.35mm) lugs.
- Polarity: Polarity symbols marked on case
- Mounting: Thru hole for #10 screw, 20 in.-lbs torque max.
- Weight: 0.66ounce, 18.7 grams



MAXIMUM RATINGS AND ELECTRICAL 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%.

	SYMBOLS	BR3505	BR351	BR352	BR354	BR356	BR358	BR3510	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at $T_C=50^{\circ}C$ (Note1)	$I_{(AV)}$	35							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	400							Amps
Rating for Fusing($t<8.3ms$)	I^2T	664							A^2S
Maximum Instantaneous Forward Voltage at 17.5A	V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^{\circ}C$	10							μA
	$T_A=100^{\circ}C$	1.0							mAmps
Isolation Voltage from case to leads	V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1,2)	$R_{\theta JC}$	2.0							$^{\circ}C/W$
Operating Temperature Range	T_J	-55 to +150							$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150							$^{\circ}C$

NOTES:

1. Unit mounted on 9"×3.5"×4.9" thick (23cm×9cm×11.8cm) Al. plate.
2. Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.



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RATING AND CHARACTERISTIC CURVES BR3505 - BR3510

FIG.1-TYPICAL FORWARD CURRENT

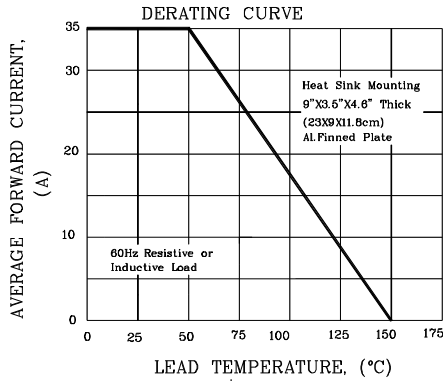


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

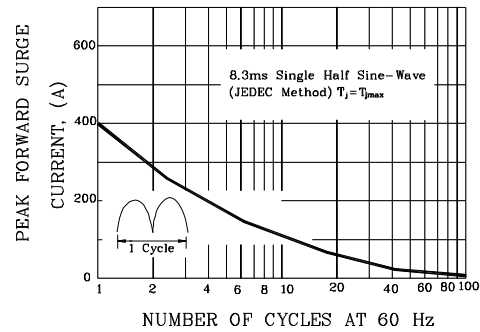


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

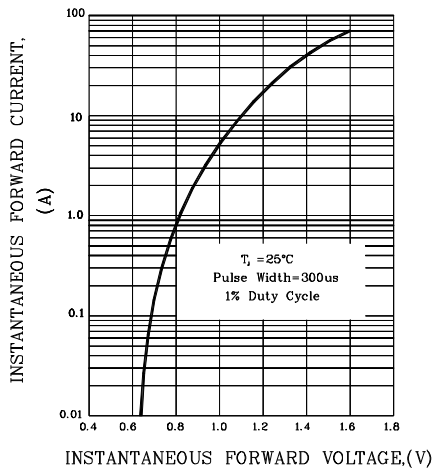


FIG.4-TYPICAL REVERSE CHARACTERISTICS

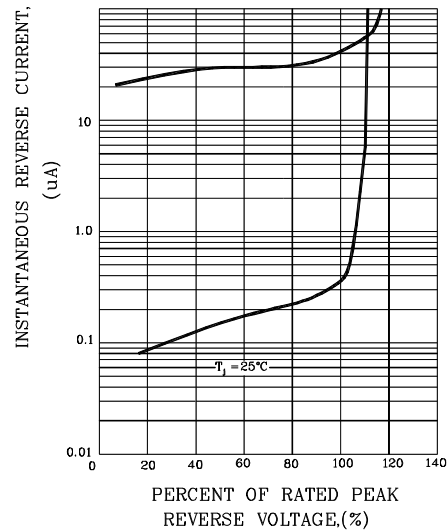


FIG.5-TYPICAL JUNCTION CAPACITANCE

