



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

BR3505L
THRU
BR3510L

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 35 Amperes

FEATURES

- * Plastic case with heatsink for Maximum Heat Dissipation
- * Diffused Junction
- * High current capability
- * Surge overload ratings - 400 Amperes
- * Low forward voltage drop
- * High Reliability
- * Designed for saving mounting space

MECHANICAL DATA

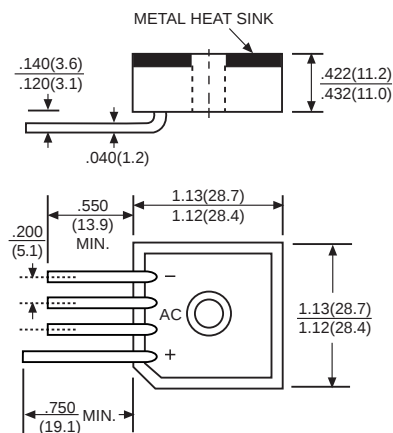
- * Case: Molded plastic with heatsink
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 30 grams

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-25L



Dimensions in inches and (millimeters)

	SYMBOL	BR3505L	BR351L	BR352L	BR354L	BR356L	BR358L	BR3510L	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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 $T_c = 55^\circ C$	I_o	35							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	400							Amps
Maximum Forward Voltage Drop per element at 17.5A DC	V_F	1.2							Volts
Maximum DC Reverse Current at Rated	I_R	10							μ Amps
DC Blocking Voltage per element									
		1000							
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	664							A^2Sec
Typical Junction Capacitance (Note1)	C_J	300							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0							$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							$^\circ C$

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2. Thermal Resistance from Junction to Case per leg.

RATING AND CHARACTERISTIC CURVES (BR3505L THRU BR3510L)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

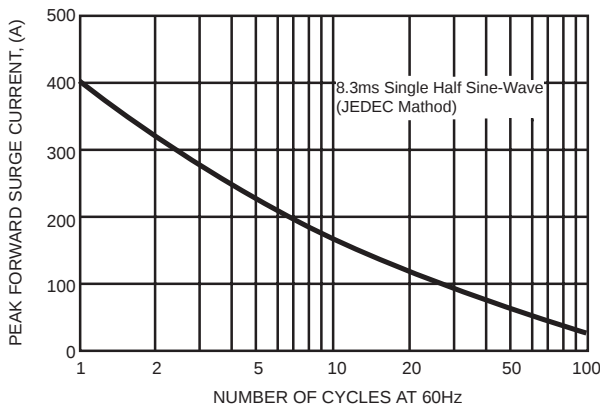


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

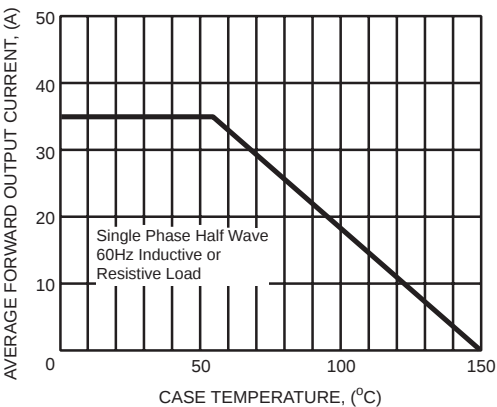


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

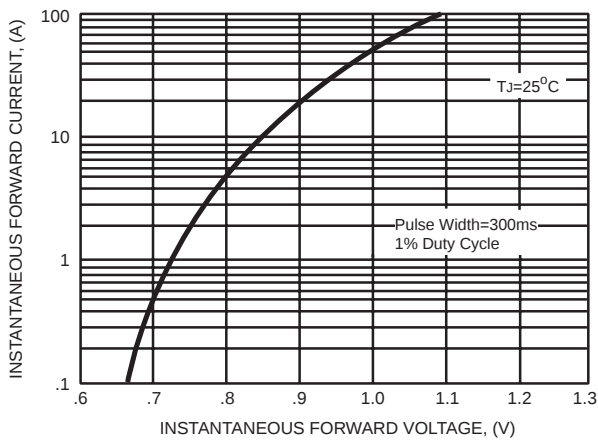


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

