

SINGLE-PHASE SILICON BRIDGE RECTIFIER

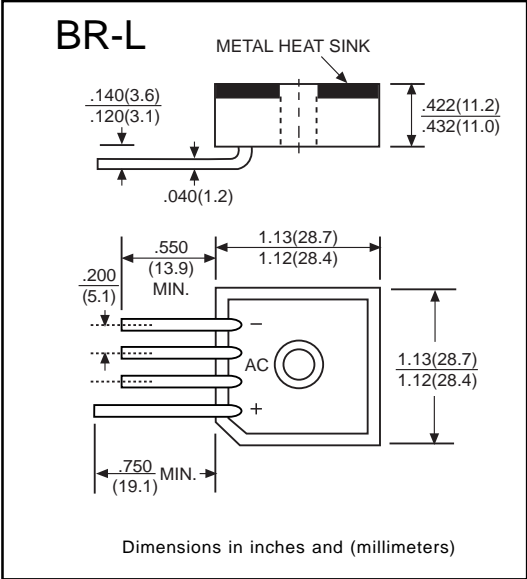
VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 25 Amperes

FEATURES

- * Plastic case with heatsink for Maximum Heat Dissipation
- * Diffused Junction
- * High current capability
- * Surge overload ratings - 300 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%.

	SYMBOL	BR25005L	BR2501L	BR2502L	BR2504L	BR2506L	BR2508L	BR2510L	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°C	I _o					25			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 12.5A DC	V _F					1.2			Volts
Maximum DC Reverse Current at Rated	I _R					10			μAmps
DC Blocking Voltage per element						1000			
I ² t Rating for Fusing (t<8.3ms)	I ² t					374			A ² Sec
Typical Junction Capacitance (Note1)	C _J					300			pF
Typical Thermal Resistance (Note 2)	R _{θJC}					2.0			°C/W
Operating and Storage Temperature Range	T _J , T _{STG}					-55 to +150			°C

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

RoHS compliant

RATING AND CHARACTERISTIC CURVES (BR25005L THRU BR2510L)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

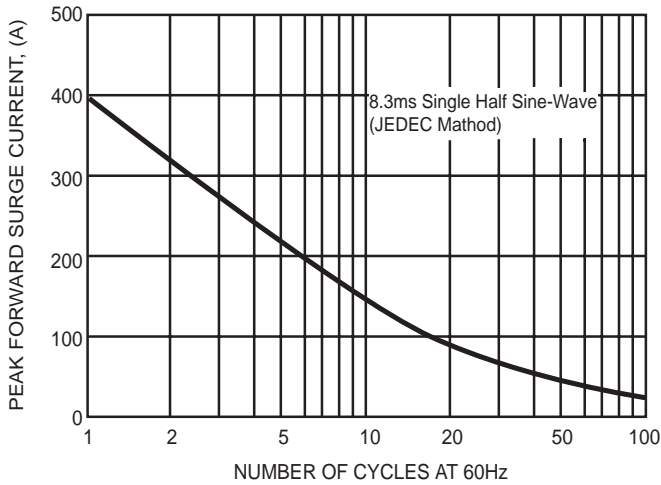


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

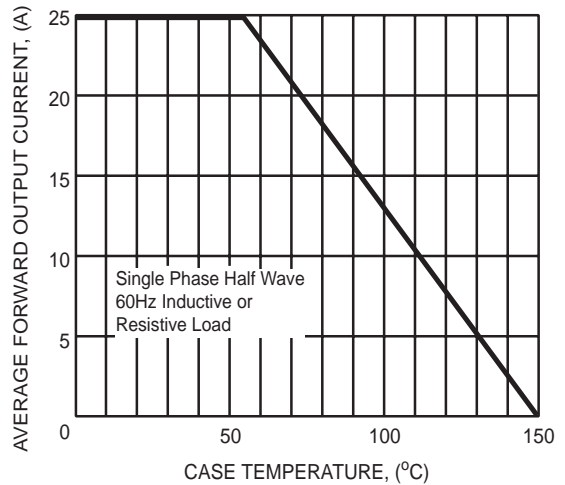


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

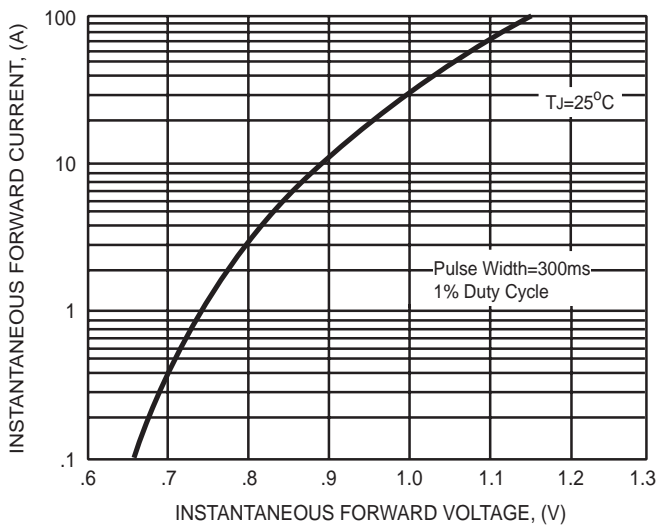


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

