



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**BR2505W
THRU
BR2510W**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 25 Amperes

FEATURES

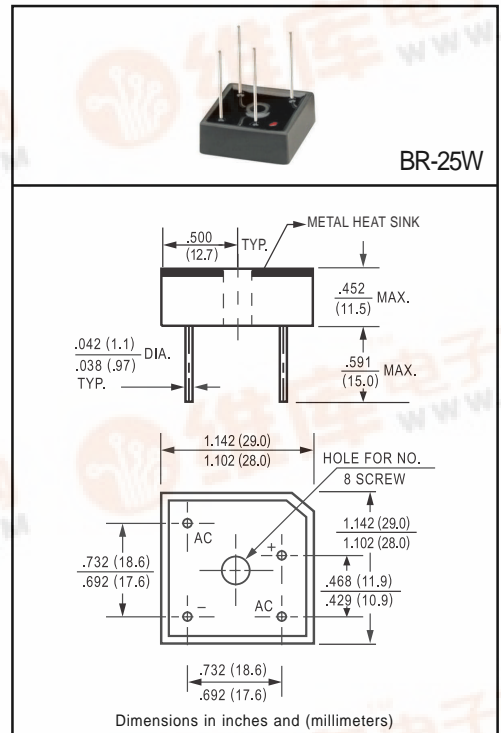
- * Plastic case with heatsink for Maximum Heat Dissipation
- * Surge overload ratings-400 Amperes
- * Low forward voltage drop

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

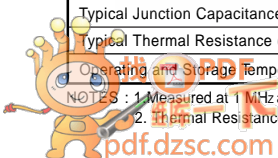
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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	BR2505W	BR251W	BR252W	BR254W	BR256W	BR258W	BR2510W	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					1.1			Volts
Maximum DC Reverse Current at Rated	I _R					10			uAmps
DC Blocking Voltage per element						500			
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}					2.5			°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.



RATING AND CHARACTERISTIC CURVES (BR2505W THRU BR2510W)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

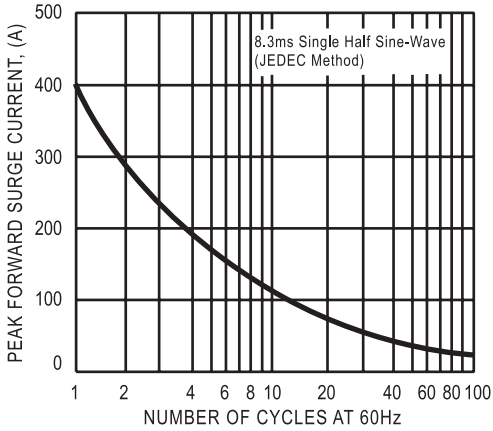


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

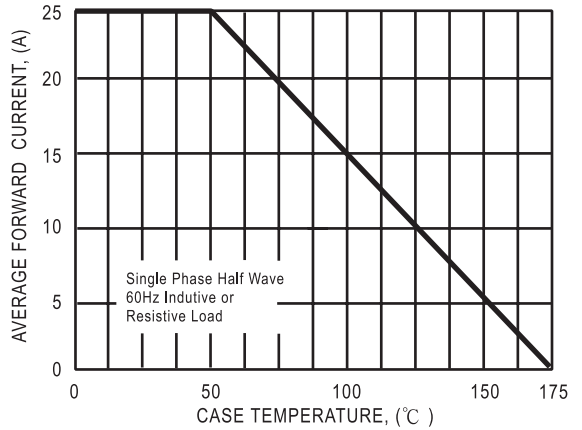


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

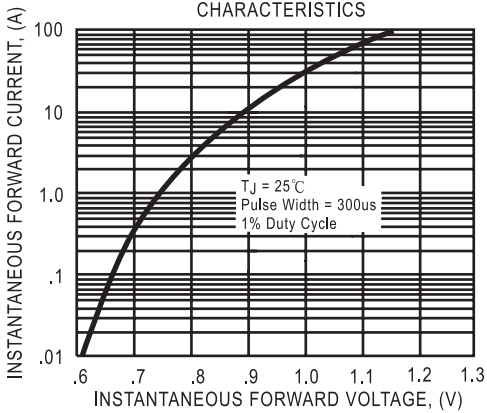


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

