



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

BR2505(W)
THRU
BR2510(W)

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
- * Diffused junction
- * Low forward voltage drop
- * High current capability
- * High reliability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94-V0 rated flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 30 grams



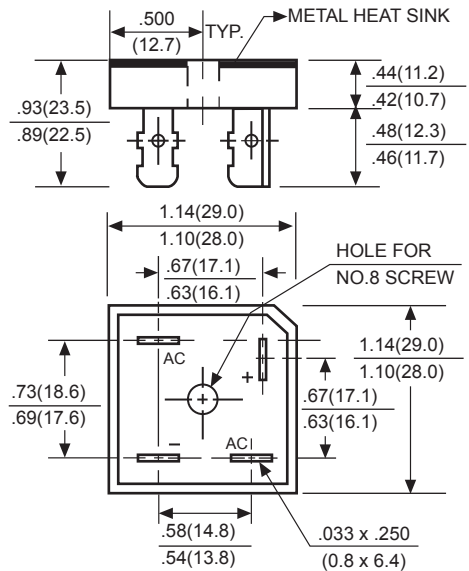
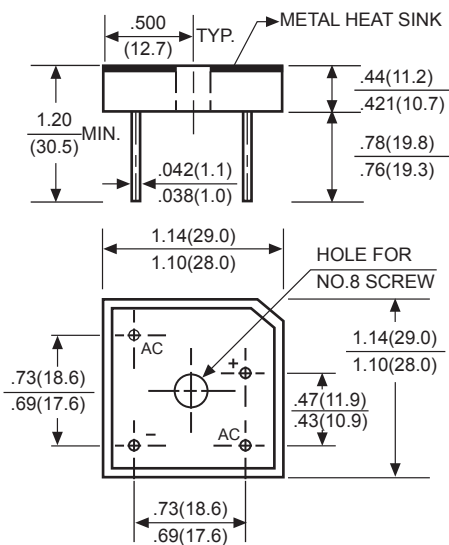
BR-25W



BR-25

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%.



Dimensions in inches and (millimeters)

	SYMBOL	BR 2505(W)	BR 251(W)	BR 252(W)	BR 254(W)	BR 256(W)	BR 258(W)	BR 2510(W)	UNITS	
Maximum Recurrent 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 Current at T _A = 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 Instantaneous Forward Voltage at 12.5A DC	V _F	1.1							Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	@T _A = 25°C	10							μAmps
		@T _A = 125°C	100							
I ² t Rating for Fusing (t<8.3ms)	I ² t	664							A ² s	
Operating and Storage Temperature Range	T _J ,T _{STG}	-55 to +150							°C	

Note: Suffix "W" for wire lead type (e.g.:BR2505W,BR251W...etc)

RATING AND CHARACTERISTIC CURVES (BR2505(W) THRU BR2510(W))

FIG. 1
TYPICAL FORWARD CURRENT
DERATING CURVE

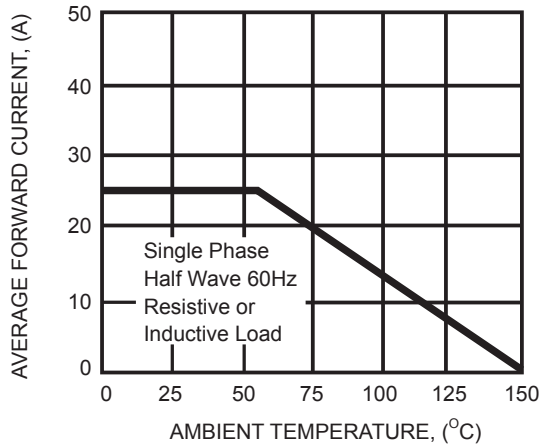


FIG. 2
MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

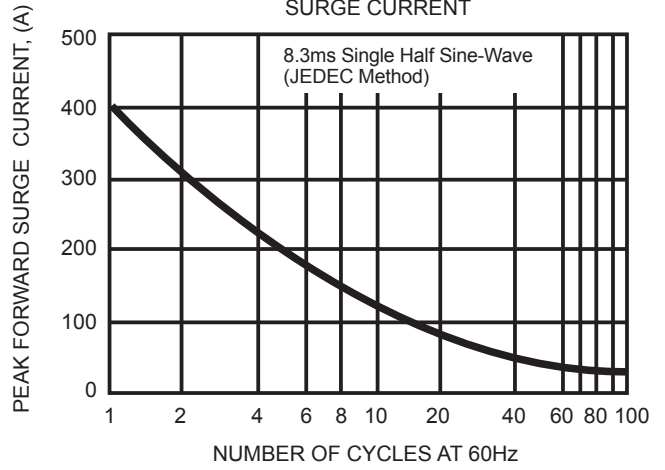


FIG. 3
TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

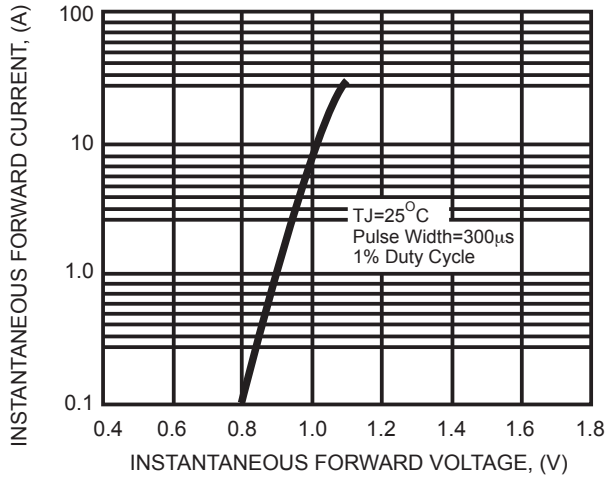
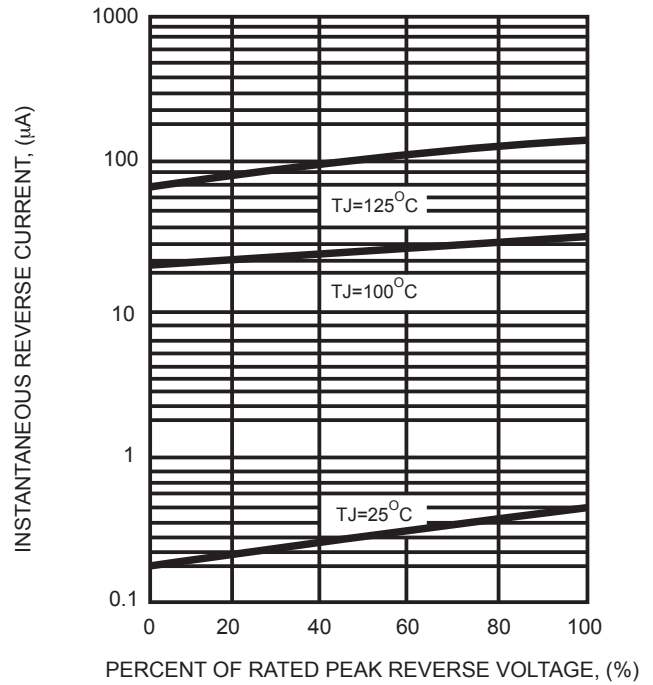


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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