DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

BR1505(W) THRU BR1510(W)

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts *CURRENT - 15 Amperes*

FEATURES

* Plastic case with heatsink for maximum heat dissipation
* Diffused junction
* Low forward voltage drop
* High current capability
* High reliability

MECHANICAL DATA

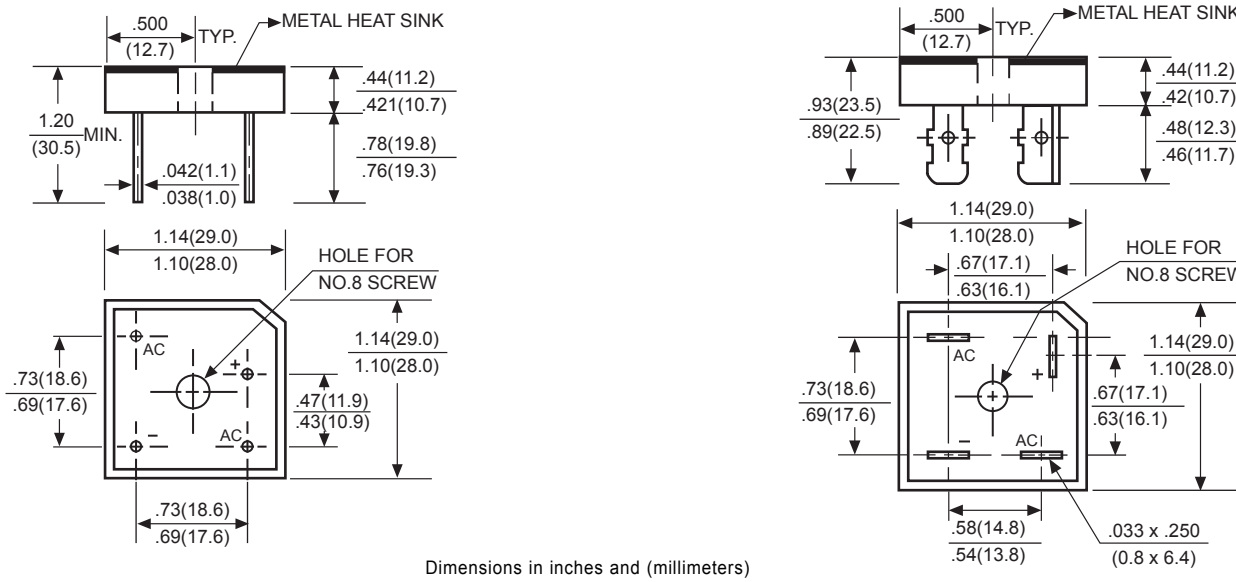
* Case: Molded plastic
* Epoxy: UL 94-V0 rated flame retardant
* Lead: MIL-STD-202E, Method 208 guaranteed
* Polarity: Symbols molded or marked on body
* Mounting position: Any
* Weight: 30 grams

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 1505(W)	BR 151(W)	BR 152(W)	BR 154(W)	BR 156(W)	BR 158(W)	BR 1510(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	15							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300							Amps
Maximum Instantaneous Forward Voltage at 7.5A DC	V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage @T_A = 25°C	I_R	10							μAmps
Maximum DC Reverse Current at Rated DC Blocking Voltage @T_A = 125°C	I_R	100							μAmps
I^2t Rating for Fusing (t<8.3mS)	I^2t	373.5							A^2s
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to +150							°C

Note: Suffix "**W**" for wire lead type (e.g.:BR1505**W**,BR151**W**...etc)

RATING AND CHARACTERISTIC CURVES (BR1505(W) THRU BR1510(W))

FIG. 1
TYPICAL FORWARD CURRENT
DERATING CURVE

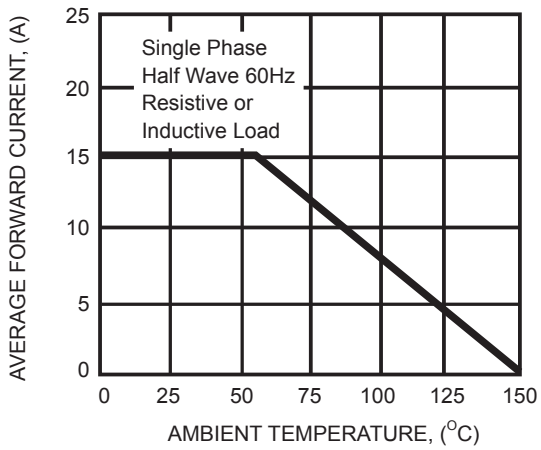


FIG. 2
MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

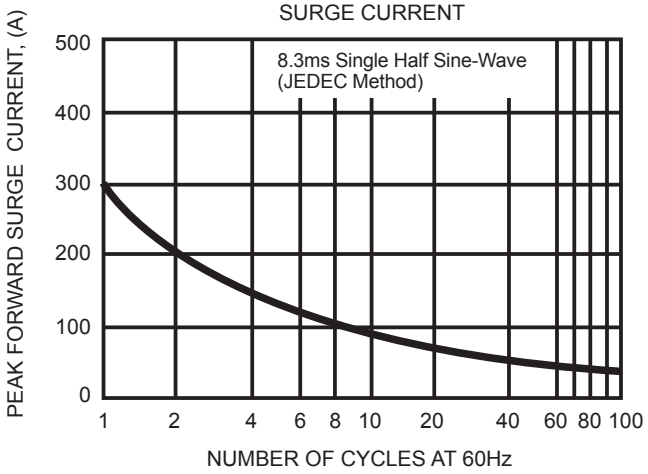


FIG. 3
TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

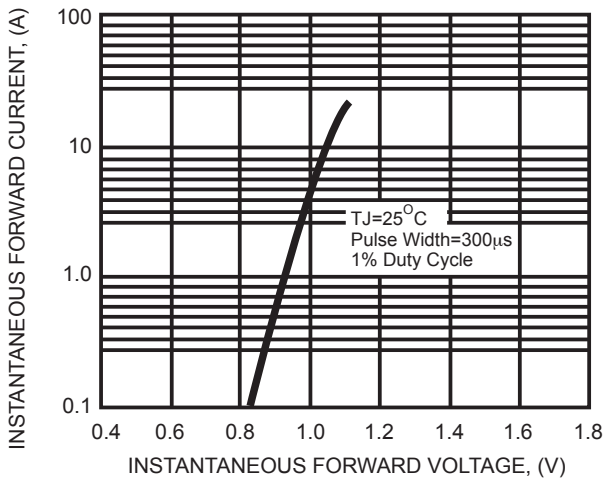
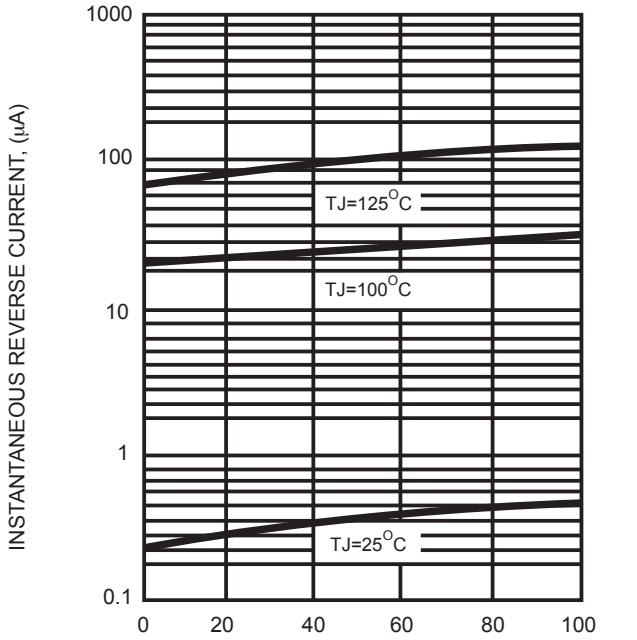


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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