



**DC COMPONENTS CO., LTD.**  
RECTIFIER SPECIALISTS

**BR2505L  
THRU  
BR2510L**

**TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER**  
**VOLTAGE RANGE - 50 to 1000 Volts** **CURRENT - 25 Amperes**

**FEATURES**

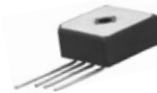
- \* Plastic case with heatsink for Maximum Heat Dissipation
- \* Diffused Junction
- \* High current capability
- \* Surge overload ratings - 300 Amperes
- \* Low forward voltage drop
- \* High Reliability
- \* Designed for saving mounting space

**MECHANICAL DATA**

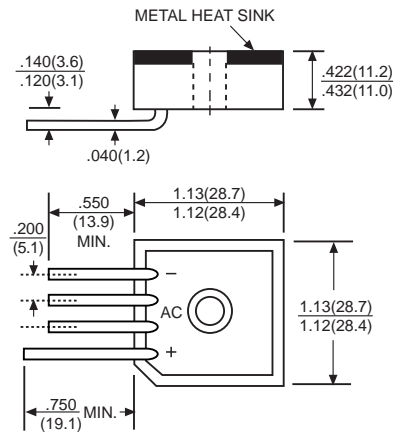
- \* Case: Molded plastic with heatsink
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: As marked
- \* Mounting position: Any
- \* Weight: 30 grams

**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%.



**BR-25L**



Dimensions in inches and (millimeters)

	SYMBOL	BR2505L	BR251L	BR252L	BR254L	BR256L	BR258L	BR2510L	UNITS	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts	
Maximum RMS Bridge Input Voltage	VRMS	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Rectified Output Current at Tc = 55°C	Io	25							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	300							Amps	
Maximum Forward Voltage Drop per element at 12.5A DC	Vf	1.2							Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	Ir	@ TA = 25°C	10							μAmps
		@ TA = 100°C	1000							
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	374							A <sup>2</sup> Sec	
Typical Junction Capacitance (Note1)	Cj	300							pF	
Typical Thermal Resistance (Note 2)	RθJC	2.0							°C/W	
Operating and Storage Temperature Range	TJ,TSTG	-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 (BR2505L THRU BR2510L)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

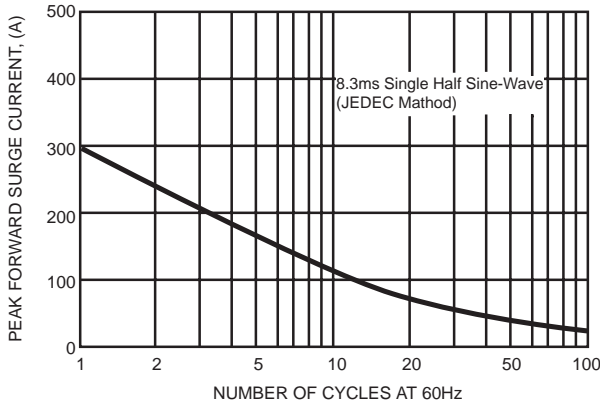


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

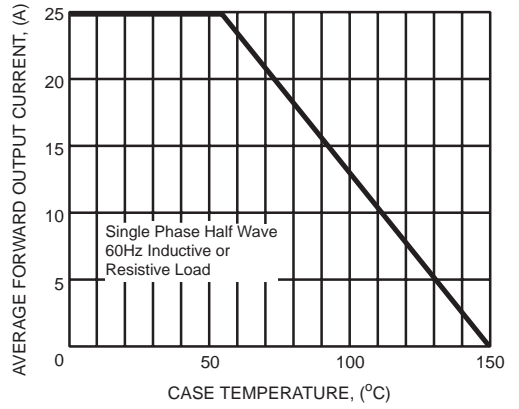


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

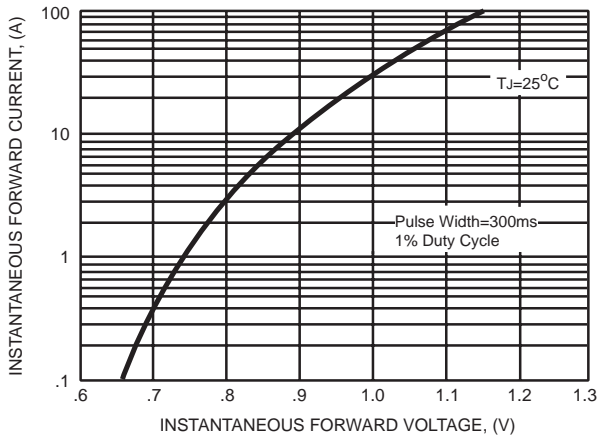


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

