

## SILICON BRIDGE RECTIFIERS

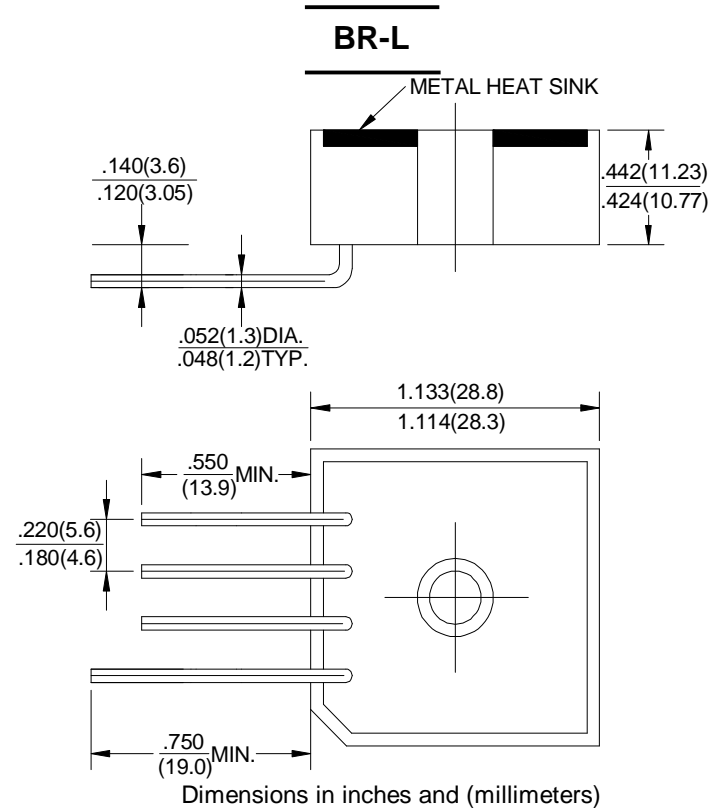
REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 10/15/25/35 Amperes

### FEATURES

- Plastic case with heatsink for heat dissipation
- Surge overload -240~400 Amperes peak
- The plastic package has UL flammability classification 94V-0

### MECHANICAL DATA

- Case: Molded plastic with heatsink integrally mounted in the bridge encapsulation
- Weight: 1 ounce, 30 grams.
- Mounting position: Any
- Terminals: Wire Lead  $\Phi$  50 mils.



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	BR	BR	BR	BR	BR	BR	BR	UNIT	
		1005L	101L	102L	104L	106L	108L	1010L		
		1505L	151L	152L	154L	156L	158L	1510L		
		2505L	251L	252L	254L	256L	258L	2510L		
		3505L	351L	352L	354L	356L	358L	3510L		
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V	
Maximum Average Forward Current for Resistive Load @T <sub>c</sub> =55°C	I <sub>(AV)</sub>	BR 10L	10	BR 15L	15	BR 25L	25	BR 35L	35	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I <sub>FSM</sub>	BR 10L	240	BR 15L	300	BR 25L	400	BR 35L	400	A
Maximum Forward Voltage Per Bridge Element at 5.0/7.5/12.5/17.5A Peak	V <sub>F</sub>	1.1							V	
Maximum Reverse Current at Rate DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =100°C	I <sub>R</sub>	10 1000							μA	
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	374/664							A <sup>2</sup> S	
Typical Thermal Resistance	R <sub>θJC</sub>	2.0							°C/W	
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C	
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C	

FIG.1-MAXIMUM FORWARD SURGE CURRENT

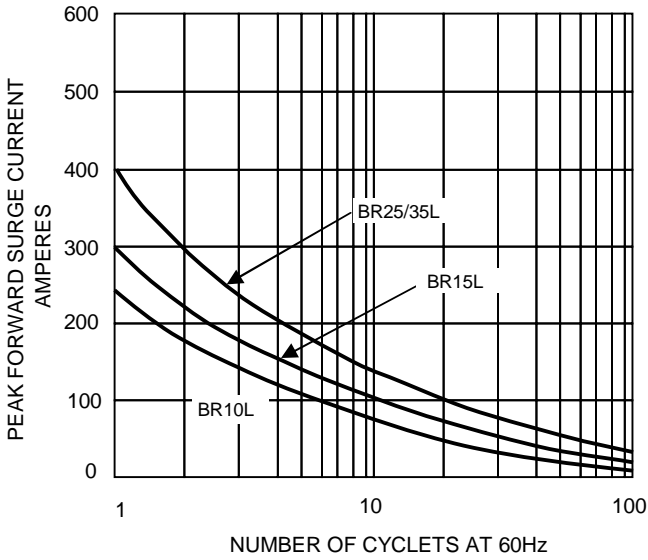


FIG.2-DERATING CURVE  
OUTPUT RECTIFIED CURRENT

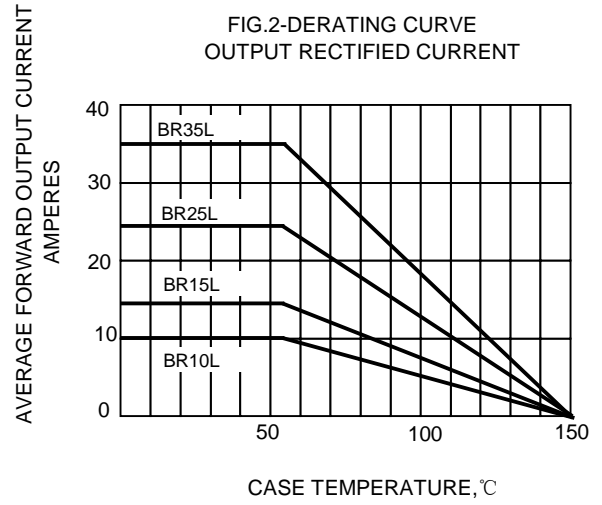


FIG.3-TYPICAL FORWARD CHARACTERISTICS

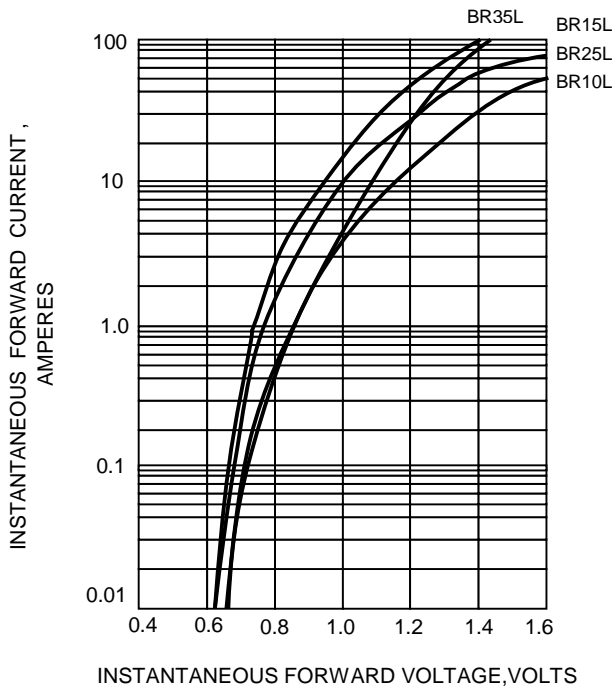


FIG.4-TYPICAL REVERSE CHARACTERISTICS

