

# AB158-E THRU AB1510-E

**SINGLE PHASE GLASS PASSIVATED  
SURFACE MOUNT FLAT BRIDGE RECTIFIER**  
VOLTAGE: 800 to 1000V      CURRENT: 1.5A

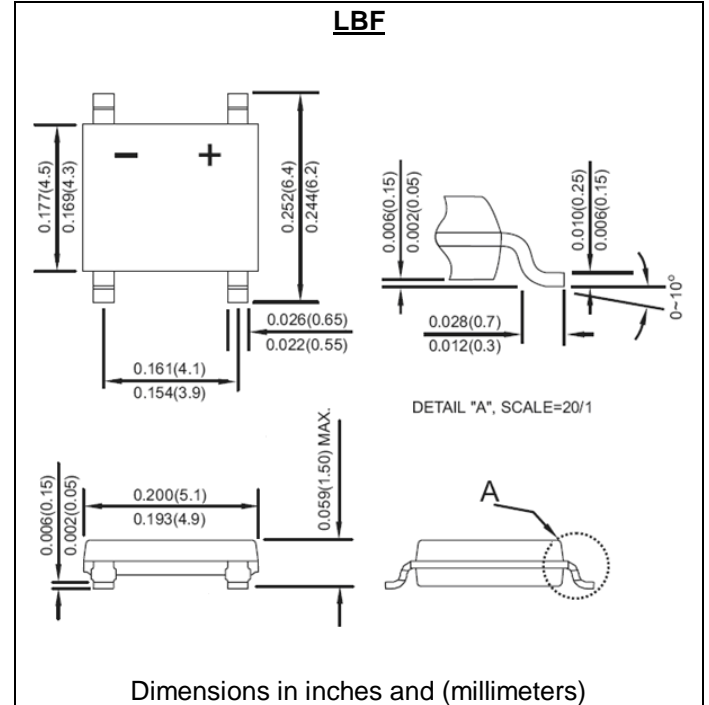


## FEATURE

Ideal for printed circuit board  
Glass passivated chip  
Reliable low cost construction utilizing molded plastic technique  
High surge current capability  
Small size, simple installation  
High temperature soldering guaranteed: 260°C/10 seconds  
Halogen Free

## MECHANICAL DATA

Terminal: Plated leads solderable per J-STD-002  
Case: UL-94 Class V-0 recognized Halogen Free Epoxy  
Polarity: Polarity symbol marked on body



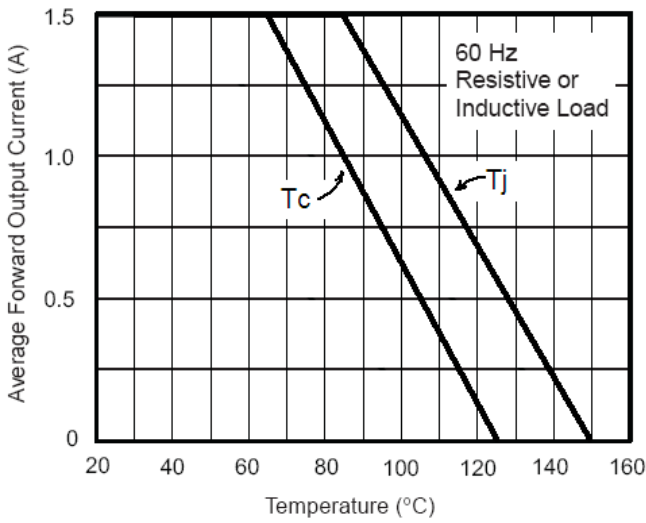
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

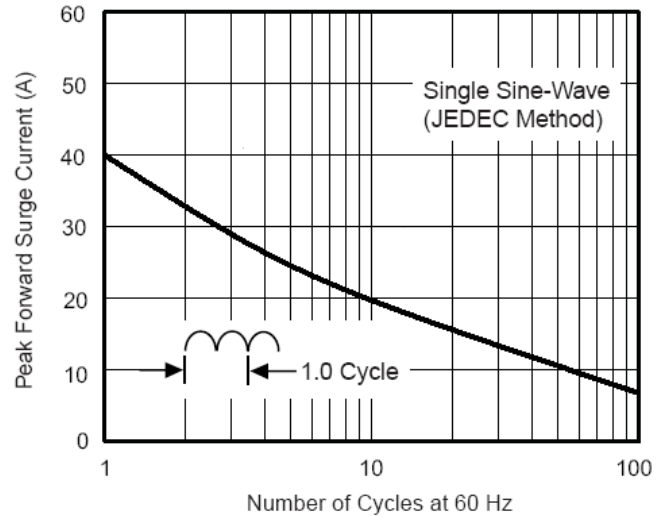
	Symbol	AB158-E	AB1510-E	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	800	1000	V
Maximum RMS Voltage	V <sub>rms</sub>	560	700	V
Maximum DC blocking Voltage	V <sub>DC</sub>	800	1000	V
Maximum average forward rectified output current	I <sub>f(av)</sub>	1.5		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	40		A
Rating for fusing(t<8.3ms)	I <sup>2</sup> t	6.9		A <sup>2</sup> sec
Maximum Instantaneous Forward Voltage at forward current 0.75A	V <sub>f</sub>	1.0		V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I <sub>r</sub>	5.0 100.0		μA
Typical Thermal resistance Junction to case	R <sub>th(jc)</sub>	15		°C/W
Storage and Operating Junction Temperature Range	T <sub>stg, Tj</sub>	-55 to +150		°C

Note:

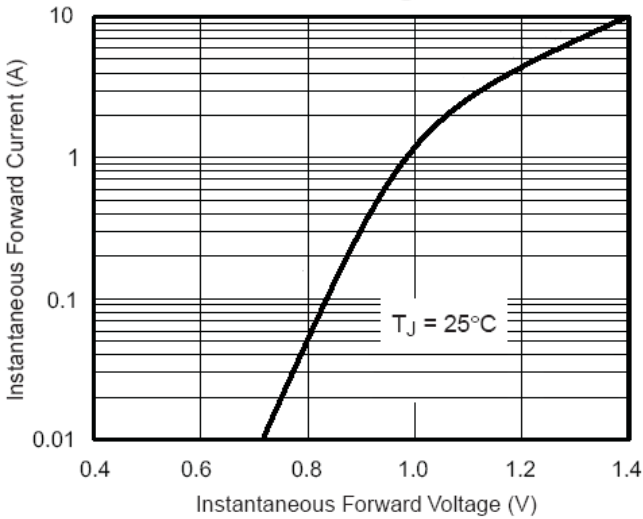
**Fig. 1 - Derating Curve Output Rectified Current**



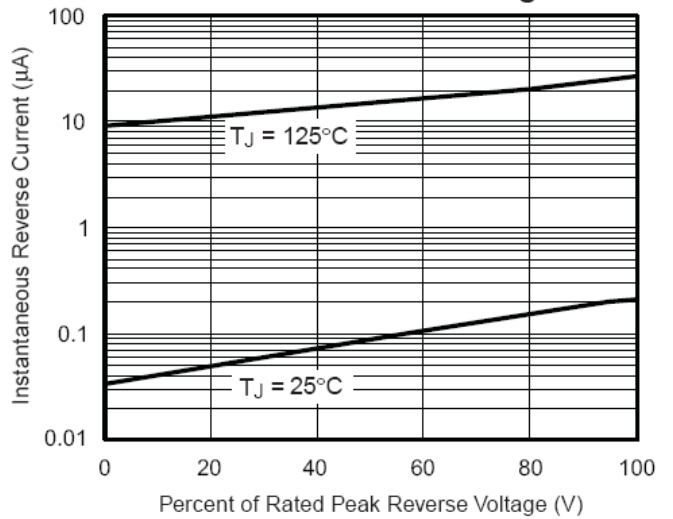
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg**



**Fig. 3 - Typical Forward Characteristics Per Leg**



**Fig. 4 - Typical Reverse Leakage Characteristics Per Leg**



**Fig. 5 - Typical Junction Capacitance Per Leg**

