

# RB10-E

**SINGLE PHASE GLASS PASSIVATED  
SURFACE MOUNT FLAT BRIDGE RECTIFIER**  
VOLTAGE: 1000V                      CURRENT: 1.0A

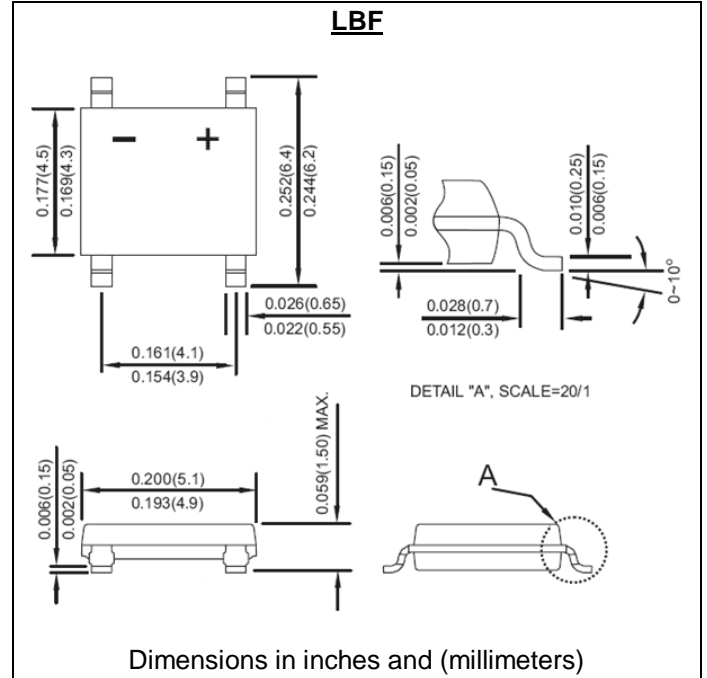


## FEATURE

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/10seconds  
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	RB10-E	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	1000	V
Maximum RMS Voltage	V <sub>rms</sub>	700	V
Maximum DC blocking Voltage	V <sub>DC</sub>	1000	V
Maximum Average Forward Rectified Current on aluminum substrate on glass-epoxy P.C.B.	I <sub>f(av)</sub>	1.0 0.8	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	30	A
Maximum Instantaneous Forward Voltage at forward current 0.4A per diode	V <sub>f</sub>	0.95	V
Rating for fusing(t<8.3ms)	I <sup>2</sup> t	3.9	A <sup>2</sup> sec
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	5.0 100.0	μA
Typical Thermal resistance junction to lead on aluminum substrate on glass-epoxy P.C.B.	R <sub>th(jl)</sub> R <sub>th(ja)</sub>	25 62.5	°C/W
junction to case (Note1 )	R <sub>th(jc)</sub>	80 20	
Storage and Operating Junction Temperature Range	T <sub>stg, Tj</sub>	-55 to +150	°C

Note:

1.Thermal Resistance from Junction to terminal mounted on 5x5mm copper pad area

RATINGS AND CHARACTERISTIC CURVES RB10-E

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

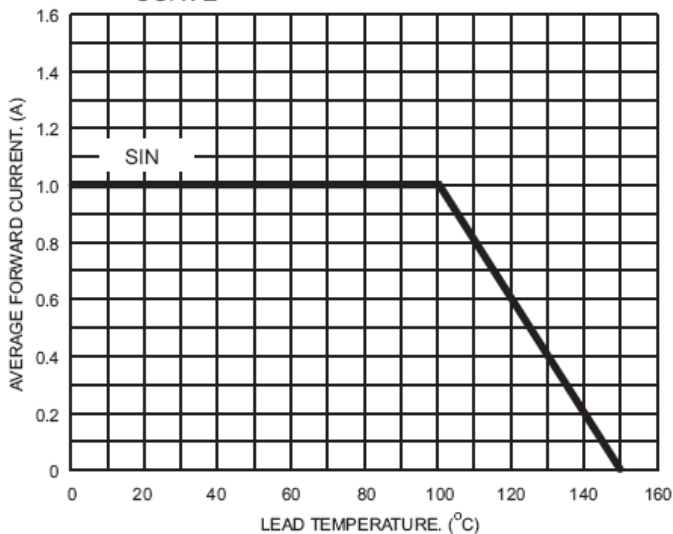


FIG.2- TYPICAL FORWARD CHARACTERISTICS

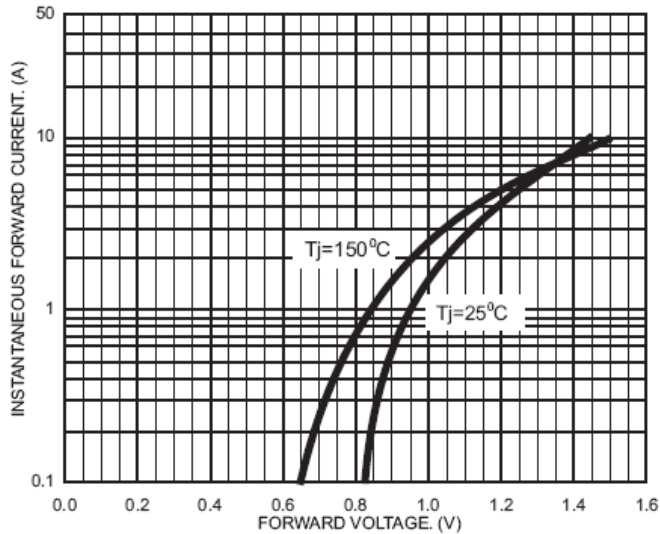


FIG.3- MAXIMUM FORWARD CURRENT DERATING CURVE

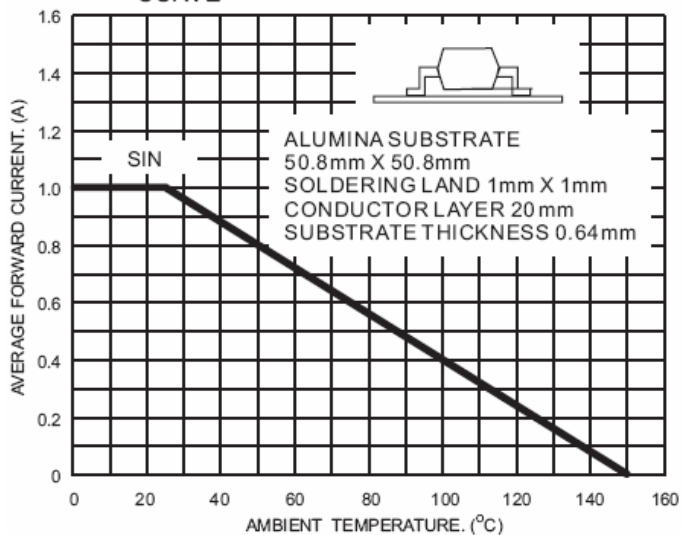


FIG.4- FORWARD POWER DISSIPATION

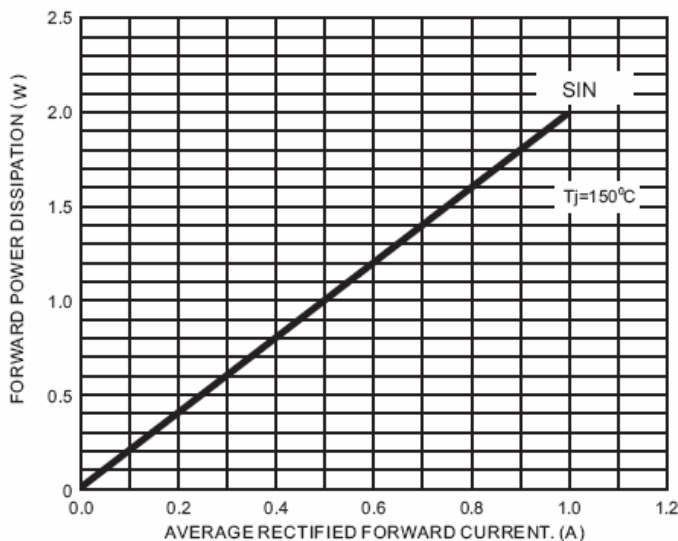


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

