

# 10ERB20DG THRU 10ERB60DG

**ULTRAFAST EFFICIENT  
GLASS PASSIVATED RECTIFIER**  
VOLTAGE: 200 TO 600V      CURRENT: 1.0A

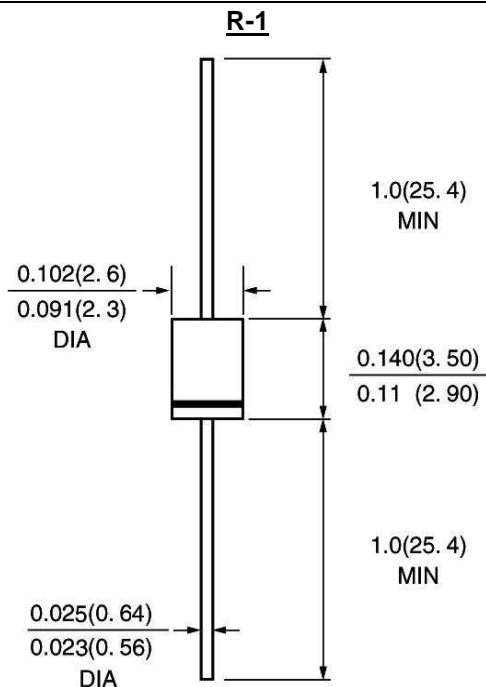


## FEATURE

Molded case feature for auto insertion  
High current capability  
Low leakage current  
High surge capability  
High temperature soldering guaranteed  
250°C /10sec/0.375" lead length at 5 lbs tension  
Glass Passivated chip

## MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: color band denotes cathode  
Mounting position: any



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	10ERB20DG	10ERB40DG	10ERB60DG	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	200	400	600	V
Maximum RMS Voltage	V <sub>rms</sub>	140	280	420	V
Maximum DC blocking Voltage	V <sub>dc</sub>	200	400	600	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =50°C	I <sub>f(av)</sub>	1.0			A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	I <sub>fsm</sub>	45	35		A
Maximum Instantaneous Forward Voltage at rated forward current	V <sub>f</sub>	1.03	1.13		V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	I <sub>r</sub>	5.0 100.0			μA μA
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	15.0			pF
Maximum Reverse Recovery Time (Note 2)	T <sub>rr</sub>	35	75		nS
Operating Temperature (Note 3)	R(ja)	50.0			°C /W
Storage and Operation Junction Temperature	T <sub>stg, Tj</sub>	-55 to +150			°C

**Note:**

1. Measured at 1.0 MHz and applied voltage of 4.0Vdc
2. Test Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
3. Thermal Resistance from Junction to Ambient at 0.375" lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES 10ERB20DG THRU 10ERB60DG

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

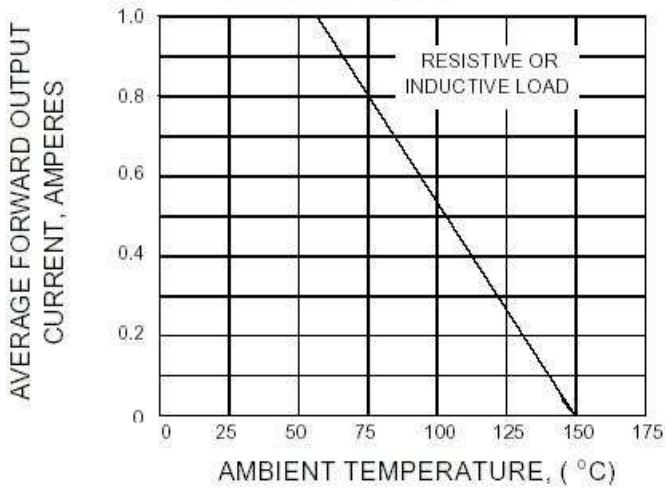


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

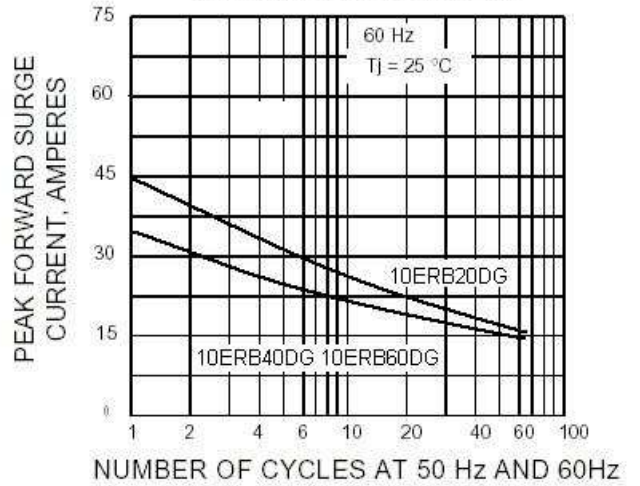


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

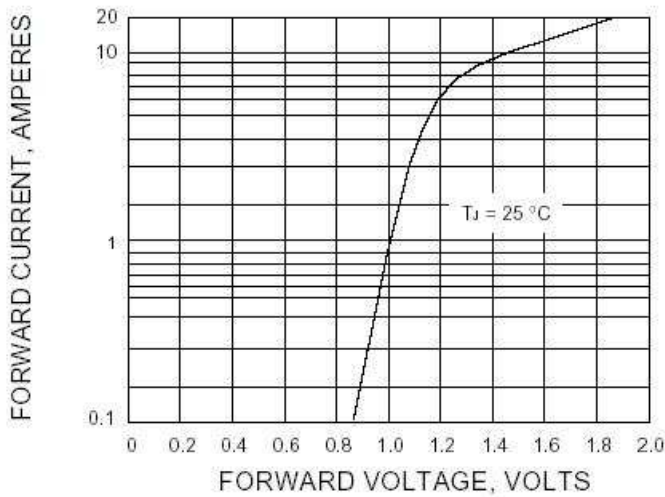
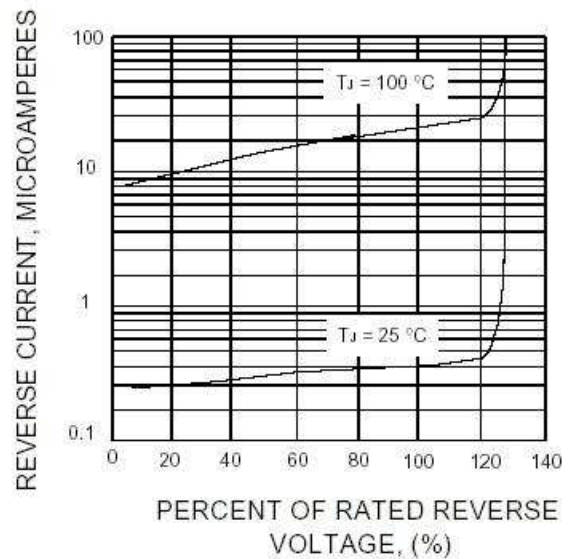


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



MARKING:

- 10ERB20DG—EB2G
- 10ERB40DG—EB4G
- 10ERB60DG—EB6G

