

10ERB20DG THRU 10ERB60DG

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

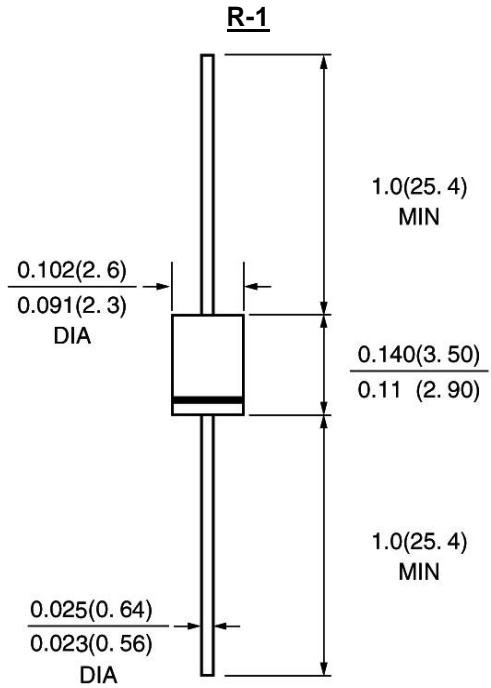


FEATURE

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

Note:

1. Measured at 1.0 MHz and applied voltage of 4.0Vdc
2. Test Condition I_f =0.5A, I_r =1.0A, I_{rr} =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

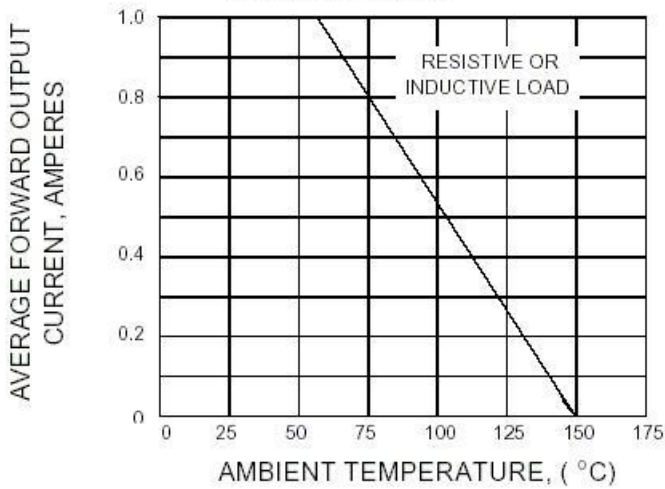


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

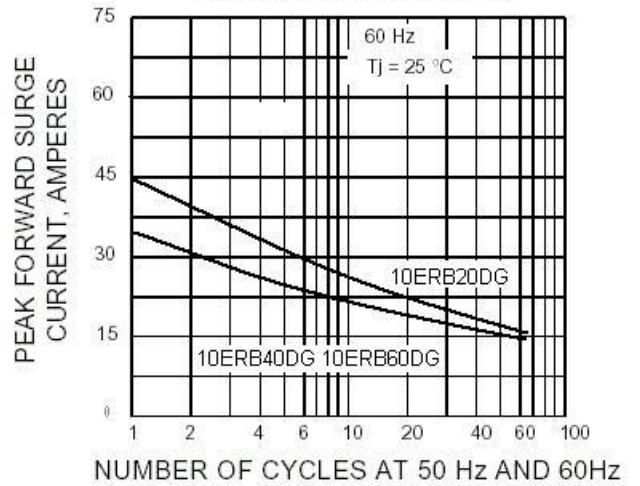


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

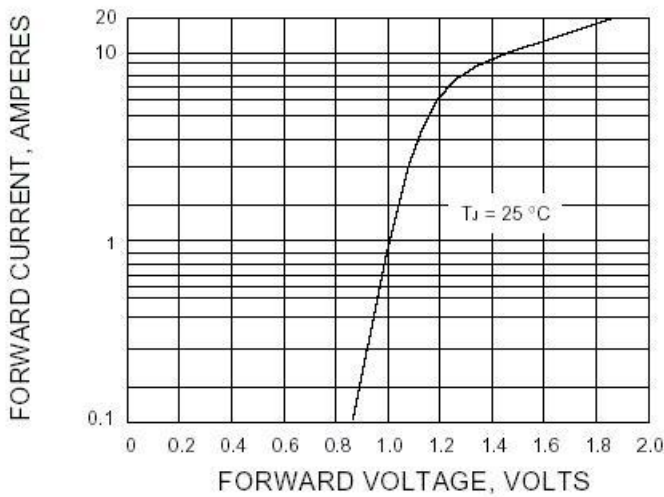
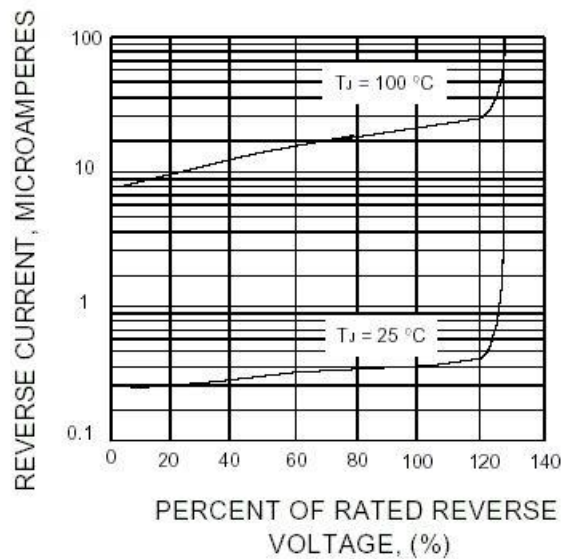


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



MARKING:

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

