10ERB20DG THRU 10ERB60DG

ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 200 TO 600V **CURRENT: 1.0A**

GULF SEMI

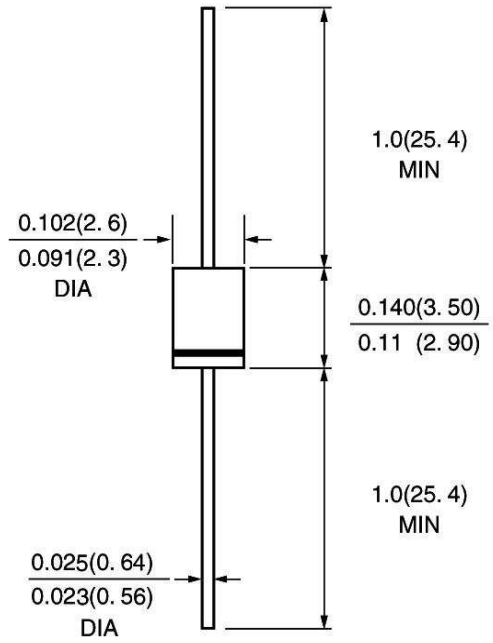
FEATURE

Molded case feature for auto insertion
High current capability
Low leakage current
High surge capability
High temperature soldering guaranteed
250℃ /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

R-1



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	10ERB20DG	10ERB40DG	10ERB60DG	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	200	400	600	V
Maximum RMS Voltage	Vrms	140	280	420	V
Maximum DC blocking Voltage	Vdc	200	400	600	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =50℃	If(av)	1.0			A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	Ifsm	45	35		A
Maximum Instantaneous Forward Voltage at rated forward current	Vf	1.03	1.13		V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =100℃	Ir	5.0 100.0			μA μA
Typical Junction Capacitance (Note 1)	Cj	15.0			pF
Maximum Reverse Recovery Time (Note 2)	Trr	35	75		nS
Operating Temperature (Note 3)	R(ja)	50.0			℃ /W
Storage and Operation Junction Temperature	Tstg, Tj	-55 to +150			℃

Note:

1. Measured at 1.0 MHz and applied voltage of 4.0Vdc
2. Test Condition If =0.5A, Ir =1.0A, Irr =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

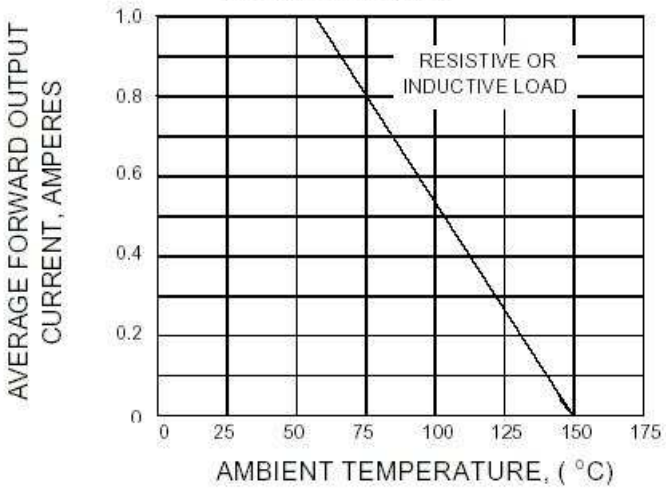


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

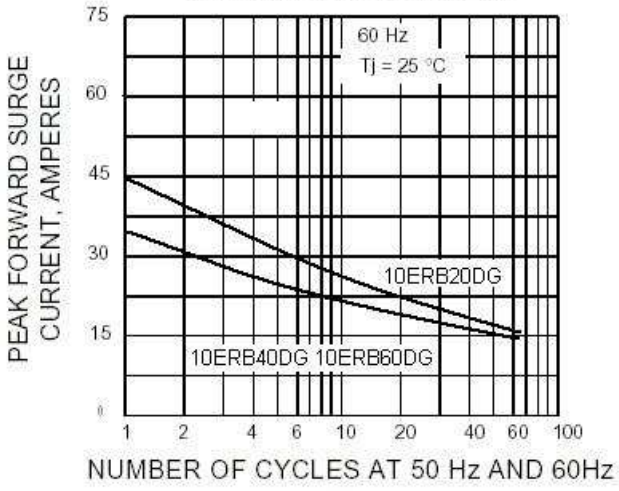


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

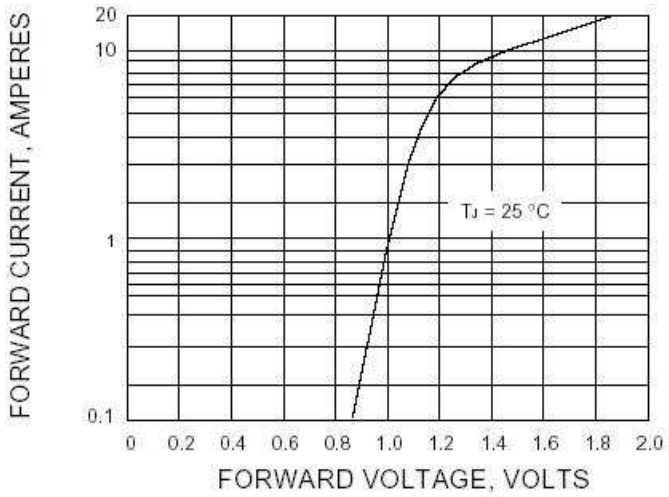
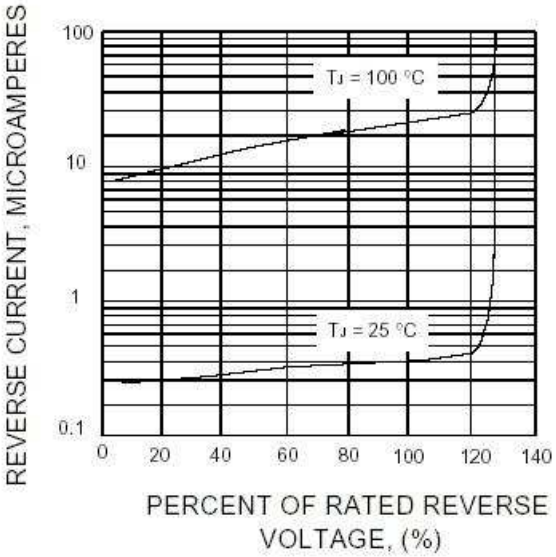


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



MARKING:

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

