

# ERB12JGP

## SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE: 600V

CURRENT: 2.0A



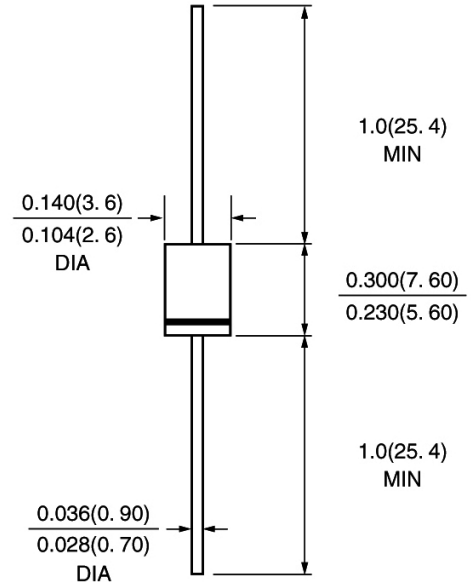
### FEATURE

High temperature metallurgically bonded construction  
Sintered glass cavity free junction  
Capability of meeting environmental standard of MIL-S-19500  
High temperature soldering guaranteed  
350°C /10sec/0.375"lead length at 5 lbs tension  
Operate at  $T_a = 55^\circ\text{C}$  with no thermal run away  
Typical  $I_r < 0.1\mu\text{A}$

### 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

### DO-15\DO-204AC



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	ERB12JGP	units
Maximum Recurrent Peak Reverse Voltage	$V_{rrm}$	600	V
Maximum RMS Voltage	$V_{rms}$	420	V
Maximum DC blocking Voltage	$V_{dc}$	600	V
Maximum Average Forward Rectified Current 3/8"lead length at $T_a = 55^\circ\text{C}$	$I_{f(av)}$	2.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	$I_{fsm}$	65.0	A
Maximum Instantaneous Forward Voltage at 2.0A	$V_f$	1.1	V
Maximum full load reverse current full cycle Average at 55°C	$I_{r(av)}$	100.0	$\mu\text{A}$
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at rated DC blocking voltage	$I_r$	5.0	$\mu\text{A}$
Typical Reverse Recovery Time (Note 1)	$T_{rr}$	2.5	$\mu\text{S}$
Typical Junction Capacitance (Note 2)	$C_j$	40.0	PF
Typical Thermal Resistance (Note 3)	$R(ja)$	25.0	$^\circ\text{C}/\text{W}$
Storage and Operating Junction Temperature	$T_{stg}, T_j$	-65 to +175	$^\circ\text{C}$

Note:

1. Reverse Recovery Condition  $I_f = 0.5\text{A}$ ,  $I_r = 1.0\text{A}$ ,  $I_{rr} = 0.25\text{A}$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES ERB12JGP

FIG. 1 - FORWARD CURRENT DERATING CURVE

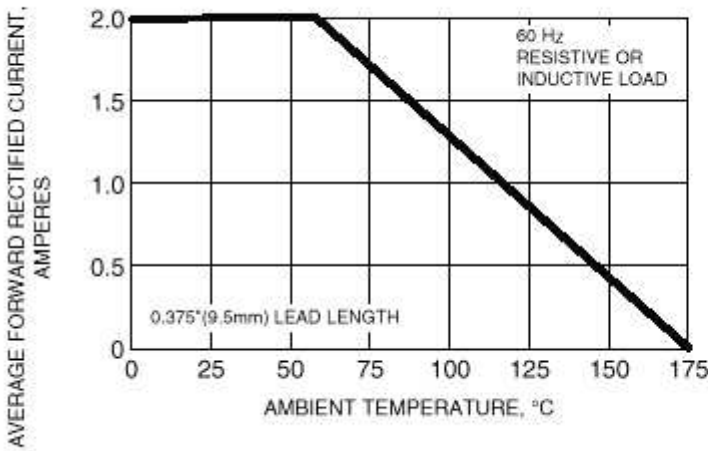


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

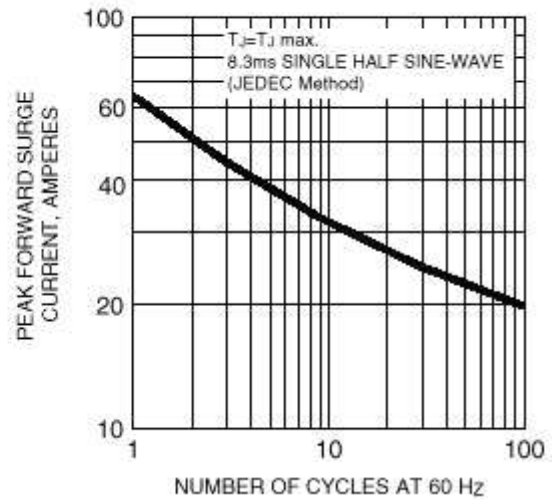


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

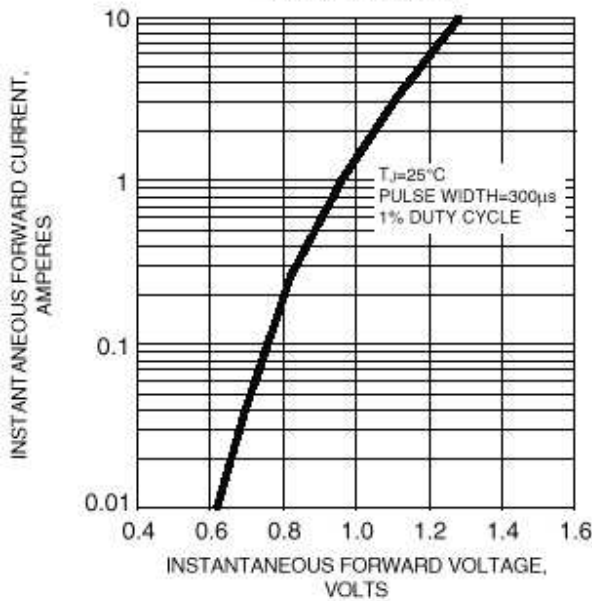


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

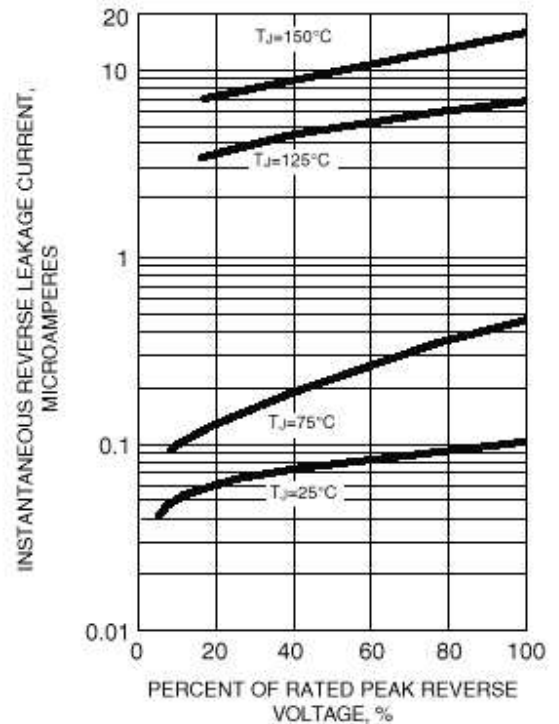


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

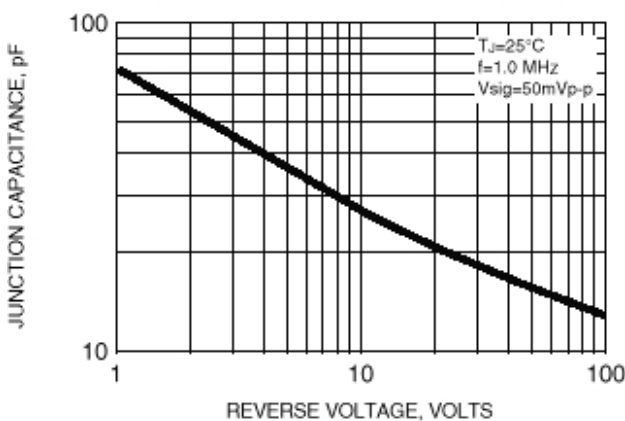


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

