

# ERB05GGR & ERB05JGR

**SINTERED GLASS JUNCTION  
FAST SWITCHING PLASTIC RECTIFIER**  
VOLTAGE:400 & 600V                      CURRENT: 0.5A



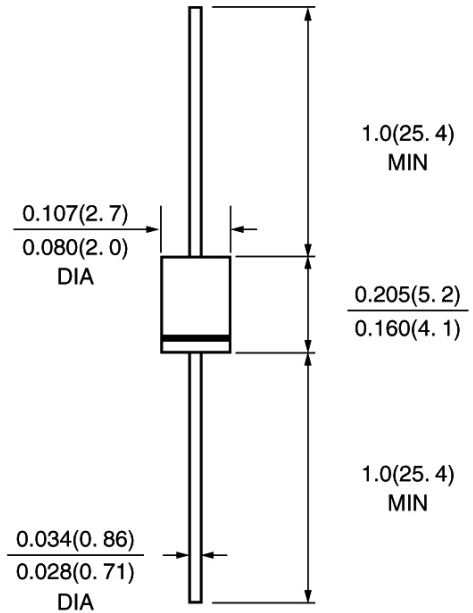
## FEATURE

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 Ta =55°C with no thermal run away  
Typical Ir<0.1µA

## 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-41\DO-204AL



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)

	SYMBOL	ERB05GGR	ERB05JGR	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	400	600	V
Maximum RMS Voltage	Vrms	280	420	V
Maximum DC blocking Voltage	Vdc	400	600	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	If(av)	0.5		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	10.0		A
Maximum Forward Voltage at rated Forward Current and 25°C IF=0.5A	Vf	1.2		V
Maximum full load reverse current full cycle average at 55°C Ambient	Ir(av)	100.0		µA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	Ir	5.0	100.0	µA
Maximum Reverse Recovery Time (Note 1)	Trr	150		nS
Typical Junction Capacitance (Note 2)	Cj	15.0		pF
Typical Thermal Resistance (Note 3)	R(ja)	55.0		°C /W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175		°C

### Note:

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
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 ERB05GGR & ERB05JGR

FIG. 1 - FORWARD CURRENT DERATING CURVE

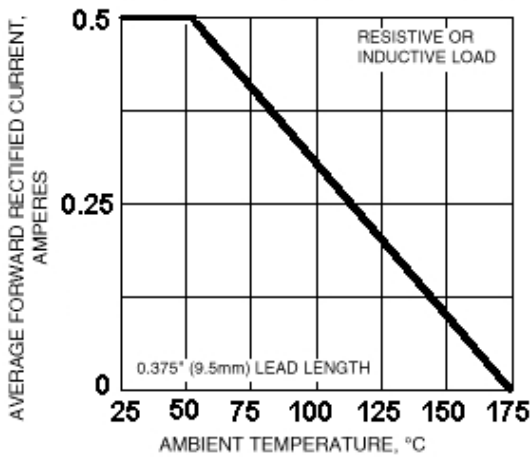


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

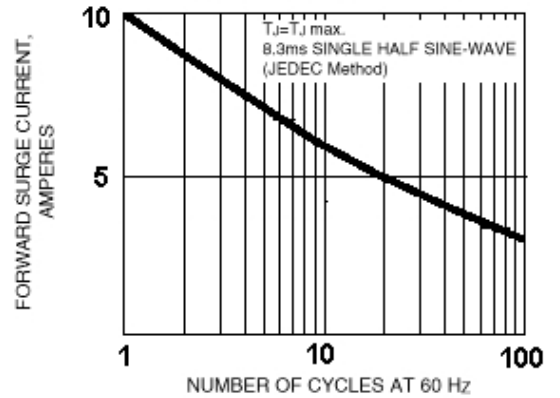


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

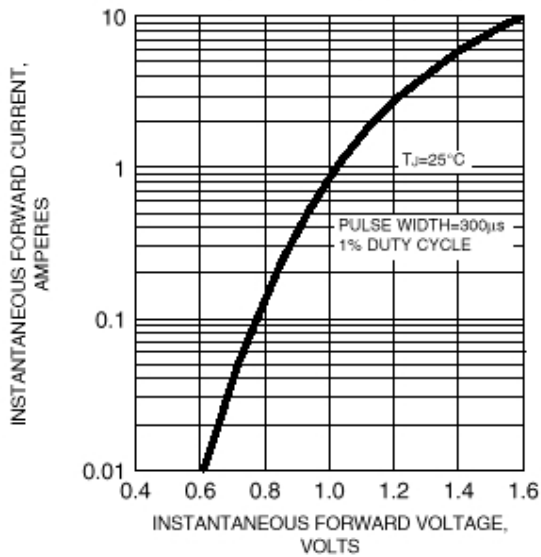


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

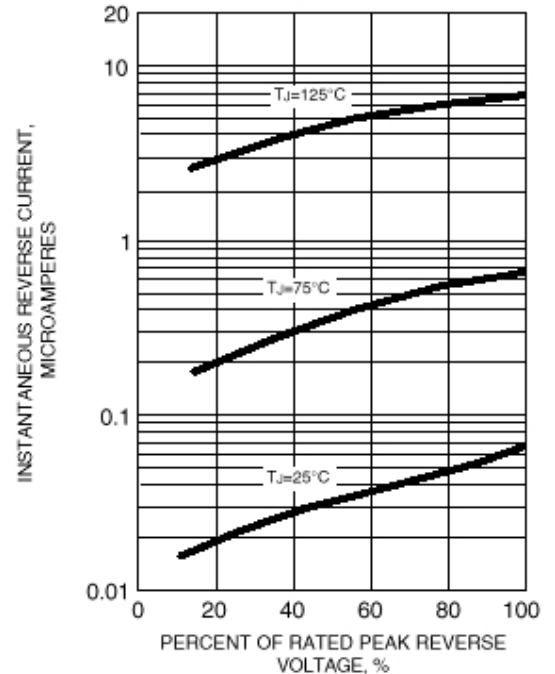


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

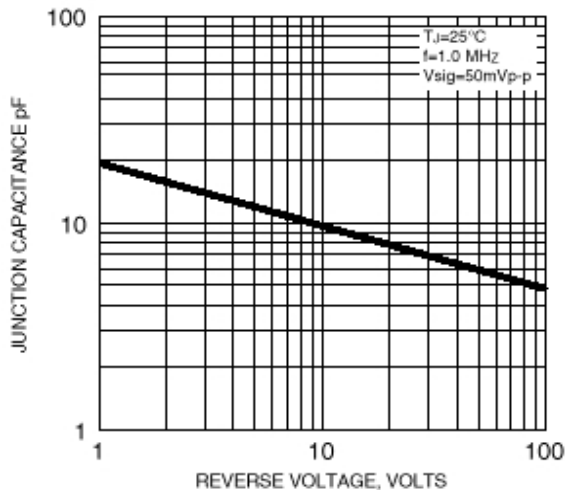


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

