

# RGP02-12E THRU RGP02-20E

**SINTERED GLASS JUNCTION  
FAST SWITCHING PLASTIC RECTIFIER**  
VOLTAGE:1200 TO 2000V      CURRENT: 0.5A



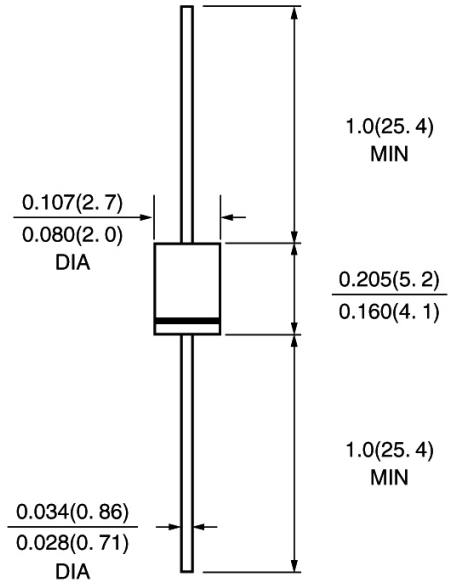
## FEATURE

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<0.2µA

## 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	RGP02 -12E	RGP02 -14E	RGP02 -16E	RGP02 -18E	RGP02 -20E	units	
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	1200	1400	1600	1800	2000	V	
Maximum RMS Voltage	V <sub>rms</sub>	840	980	1120	1360	1400	V	
Maximum DC blocking Voltage	V <sub>dc</sub>	1200	1400	1600	1800	2000	V	
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	I <sub>f(av)</sub>	0.5						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	20.0						A
Maximum Forward Voltage at 0.1A and 25°C	V <sub>f</sub>	1.8						V
Maximum full load reverse current full cycle Average at 55°C Ambient	I <sub>r(av)</sub>	100						µA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I <sub>r</sub>	5.0 50.0						µA
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	300						nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	5.0						pF
Typical Thermal Resistance (Note 3)	R(ja)	65.0						°C /W
Storage and Operating Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-65 to +175						°C

### Note:

- Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES RGP02-12E THRU RGP02-20E

FIG. 1 - FORWARD CURRENT DERATING CURVE

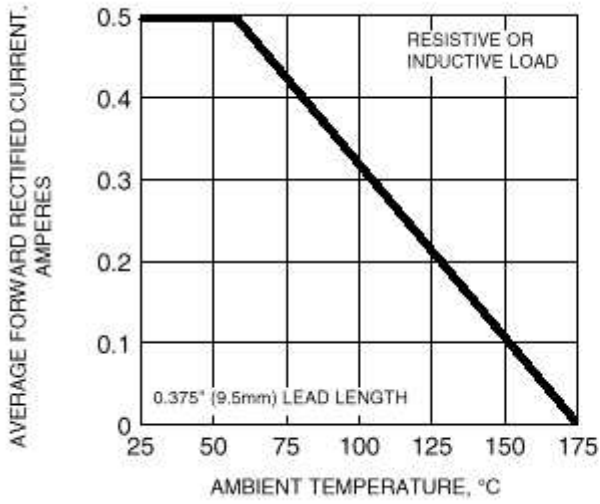


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

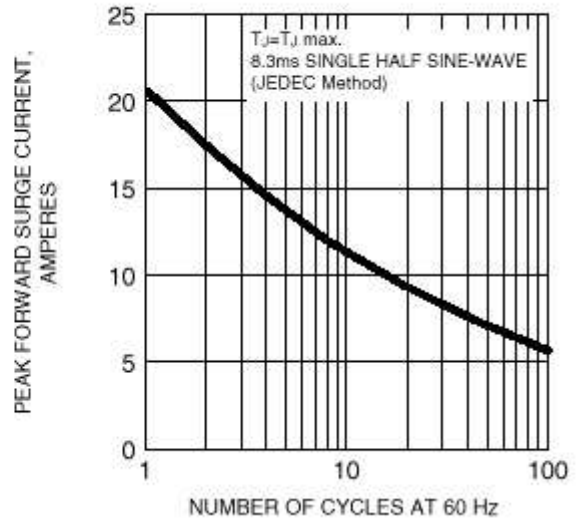


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

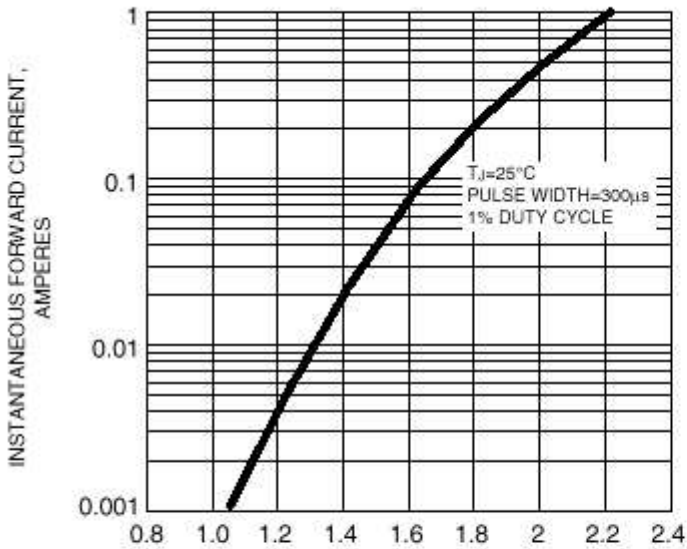


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

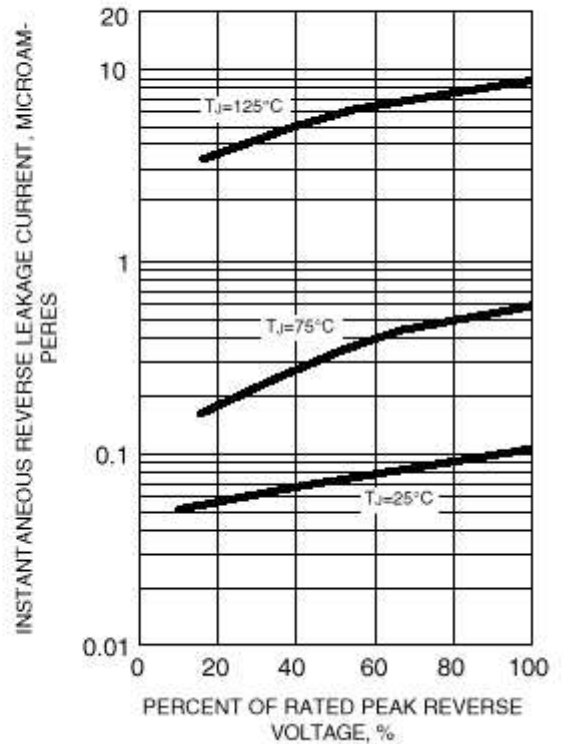


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

