

# RGP10A THRU RGP10M

**SINTERED GLASS JUNCTION  
FAST SWITCHING PLASTIC RECTIFIER**  
VOLTAGE:50 TO 1000V      CURRENT: 1.0A



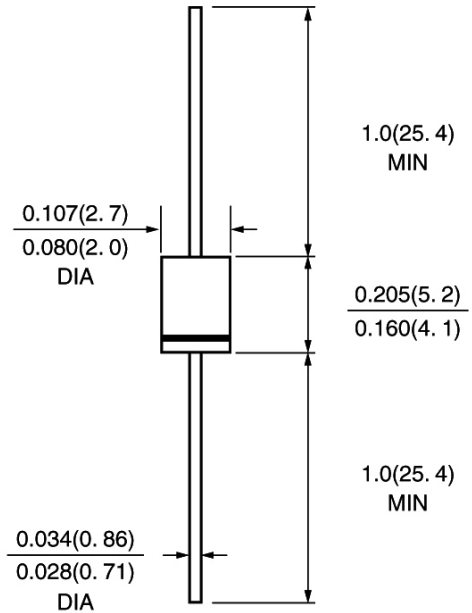
## FEATURE

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 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



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	RGP 10A	RGP 10B	RGP 10D	RGP 10G	RGP 10J	RGP 10K	RGP 10M	units	
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V	
Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	If(av)	1.0								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30.0								A
Maximum Forward Voltage at rated Forward Current and 25°C	Vf	1.3								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	5.0 200.0								µA µA
Maximum Reverse Recovery Time (Note 1)	Trr	150			250		500		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:

- Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =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 RGP10A THRU RGP10M

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FIG. 1 - FORWARD CURRENT DERATING CURVE

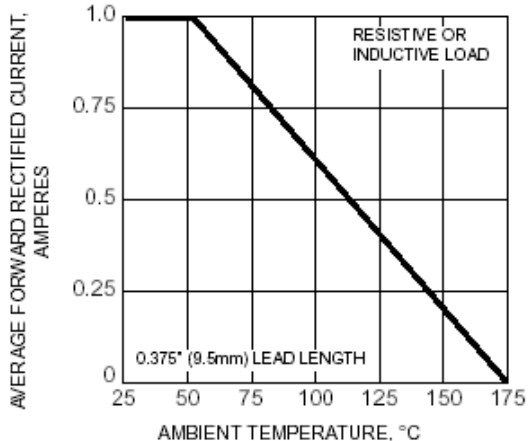


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

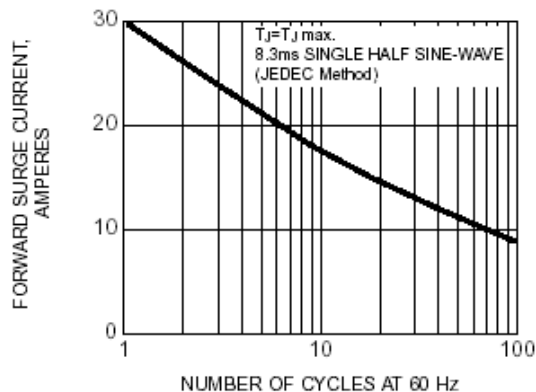


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

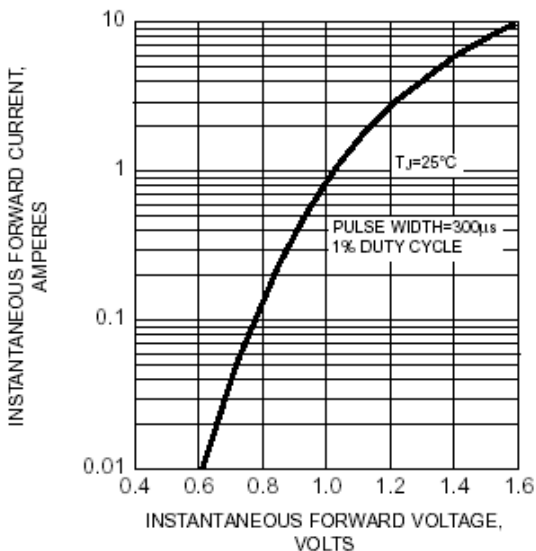


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

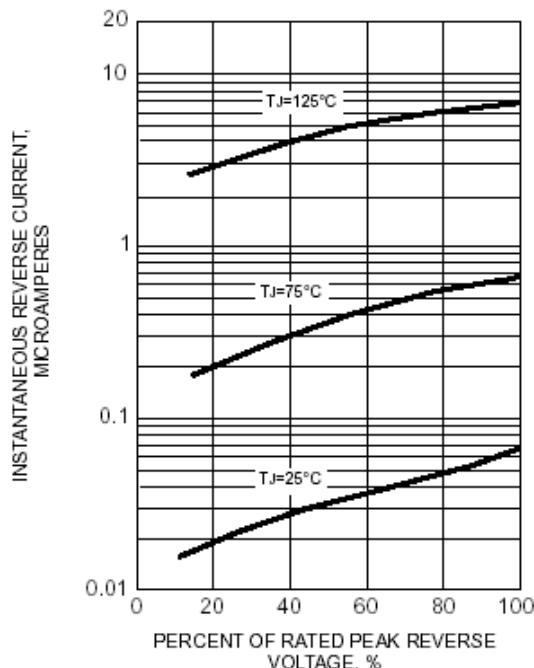


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

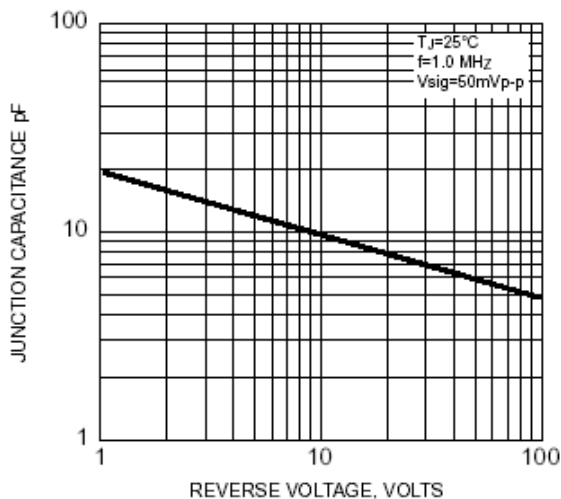


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

