

RGP10B-E

**SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER**
VOLTAGE: 100V CURRENT: 1.0A



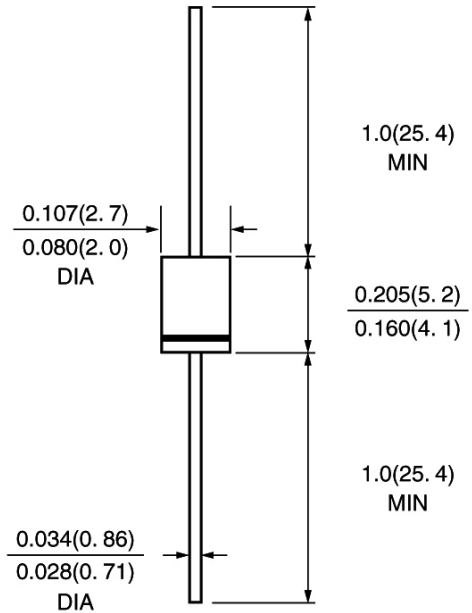
FEATURE

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
Halogen Free

MECHANICAL DATA

Terminal: Plated axial leads solderable per
MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Halogen
Free ant 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	RGP10B-E	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	100	V
Maximum RMS Voltage	V _{rms}	70	V
Maximum DC blocking Voltage	V _{dc}	100	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	I _{f(av)}	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	30.0	A
Maximum Forward Voltage at rated Forward Current and 25°C	V _f	1.3	V
Maximum full load reverse current full cycle average at 55°C Ambient	I _{r(av)}	100.0	μA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	I _r	5.0 200.0	μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	150	nS
Typical Junction Capacitance (Note 2)	C _j	15.0	pF
Typical Thermal Resistance (Note 3)	R _{th(ja)}	55.0	°C /W
Storage and Operating Junction Temperature	T _{stg, Tj}	-65 to +175	°C

Note:

1. Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =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 RGP10B-E

FIG. 1 - FORWARD CURRENT DERATING CURVE

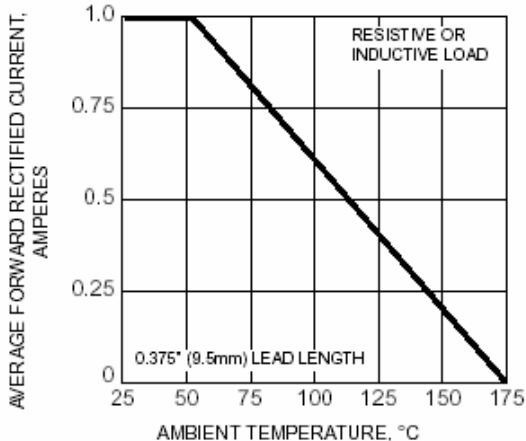


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

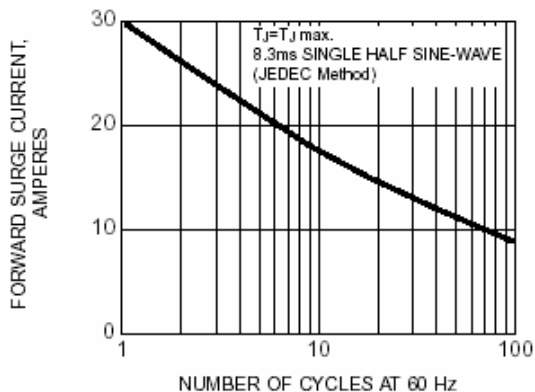


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

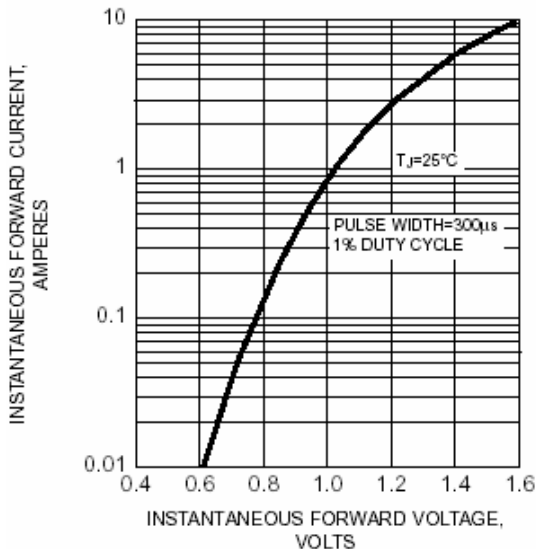


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

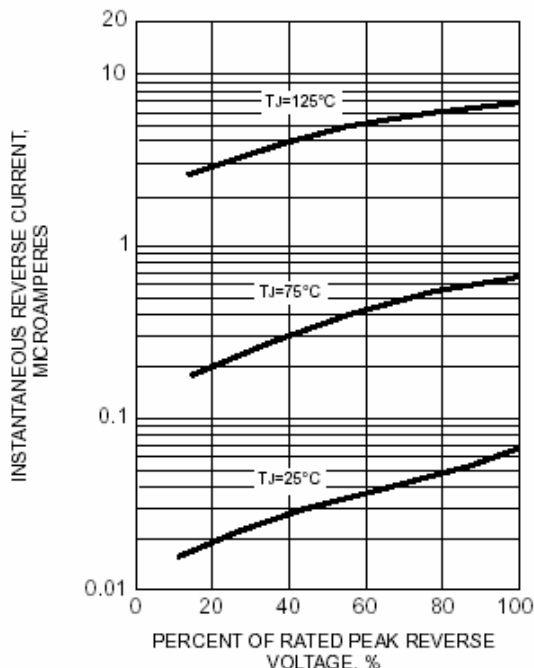


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

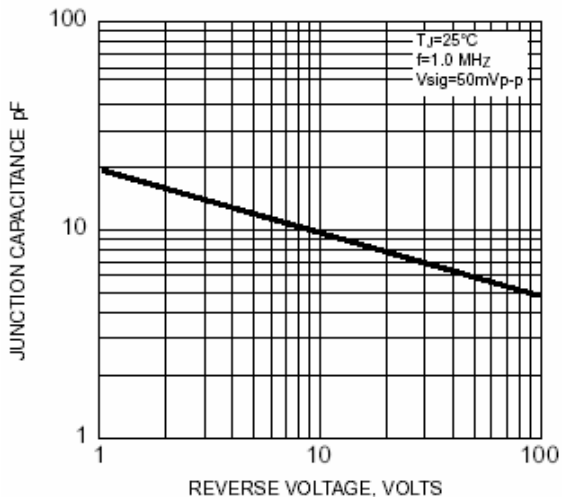


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

