# RG2J

## SINTERED GLASS JUNCTION FAST SWITCHING RECTIFIER

VOLTAGE: 600V

**MECHANICAL DATA** 

Mounting position: any

Case: SOD-57 sintered glass case

Terminal: Plated axial leads solderable per

Polarity: color band denotes cathode end

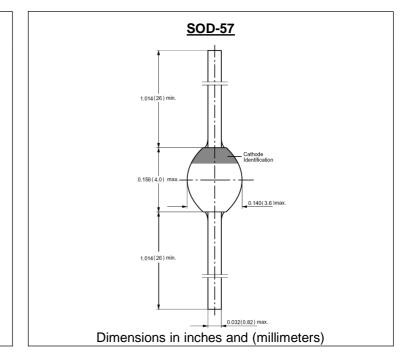
MIL-STD 202E, method 208C

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  $350^{\circ}$ C /10sec/0.375"lead length at 5 lbs tension Operate at Ta =55°C with no thermal runaway Fast switching for high efficiency





### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		SYMBOL	RG2J	units
Maximum Recurrent Peak Reverse Voltage		Vrrm	600	V
Maximum RMS Voltage		Vrms	420	V
Maximum DC blocking Voltage		Vdc	600	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C		lf(av)	2.0	A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load		lfsm	50	A
Maximum Forward Voltage at rated Forward Current and 25°C		Vf	1.3	V
Maximum full load reverse current full cycle average 0.375"(9.5MM) lead length at Ta=100°C		lr(av)	100	μΑ
Maximum DC Reverse Current at rated DC blocking voltage	Ta =25°C Ta =125°C	Ir	5.0 100	μΑ
Typical Reverse Recovery Time	(Note 1)	Trr	200	nS
Typical Junction Capacitance	(Note 2)	Cj	15	pF
Typical Thermal Resistance	(Note 3)	Rth(ja)	55	°C /\
Storage and Operating Temperature Range		Tstg, Tj	-65 to +175	°C

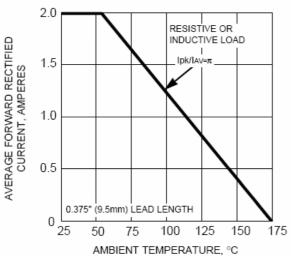
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A

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 RG2J**

FIG. 1 - FORWARD CURRENT DERATING CURVE





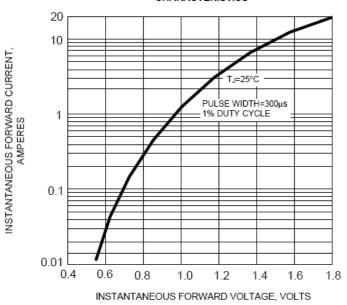
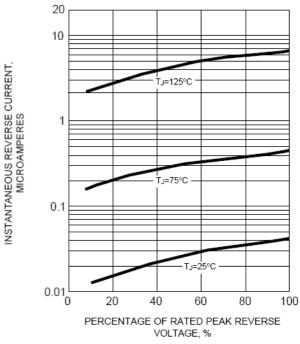
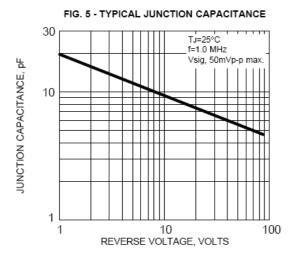


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT 50 Tj=Tj max. 8.3ms SINGLE HALF SINE-WAVE (JEDEC Method) PEAK FORWARD SURGE CURRENT, 40 30 AMPERES 20 10 0 1 10 100 NUMBER OF CYCLES AT 60 Hz







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