

# RG1.5J

## SINTERED GLASS JUNCTION FAST AVALANCHE RECTIFIER

VOLTAGE: 600V

CURRENT: 1.5A



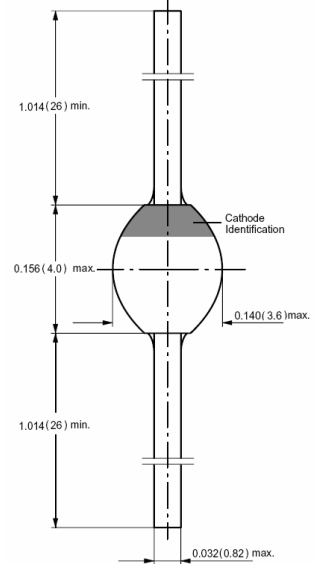
### FEATURE

Glass passivated  
 Hermetically sealed package  
 Low reverse current  
 Soft recovery characteristics

### MECHANICAL DATA

Case: SOD-57 sintered glass case  
 Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
 Polarity: color band denotes cathode end  
 Mounting position: any

### SOD-57



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)

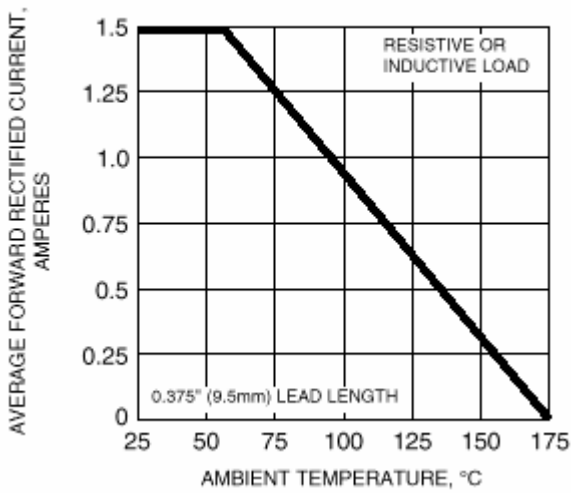
	SYMBOL	RG1.5J	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	V
Maximum RMS Voltage	$V_{RMS}$	420	V
Maximum DC blocking Voltage	$V_{DC}$	600	V
Maximum Average Forward Rectified Current 3/8" lead length at $T_a=55^\circ\text{C}$	$I_{FAV}$	1.5	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	50	A
Maximum Forward Voltage at rated Forward Current and 25°C	$V_F$	1.3	V
Maximum DC Reverse Current at $V_{DC} = 600\text{V}$ and 25°C	$I_R$	5.0	$\mu\text{A}$
Maximum DC Reverse Current at $V_{DC} = 650\text{V}$ and 25°C	$I_R$	5.0	$\mu\text{A}$
Maximum DC Reverse Current at $V_{DC} = 700\text{V}$ and 25°C	$I_R$	25.0	$\mu\text{A}$
Maximum DC Reverse Current at $V_{DC} = 600\text{V}$ and 150°C	$I_R$	200	$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	250	nS
Typical Junction Capacitance (Note 2)	$C_j$	25.0	pF
Typical Thermal Resistance (Note 3)	$R_{th}(ja)$	45.0	$^\circ\text{C}/\text{W}$
Storage and Operating Junction Temperature	$T_{stg}, T_j$	-65 to +175	$^\circ\text{C}$

Note:

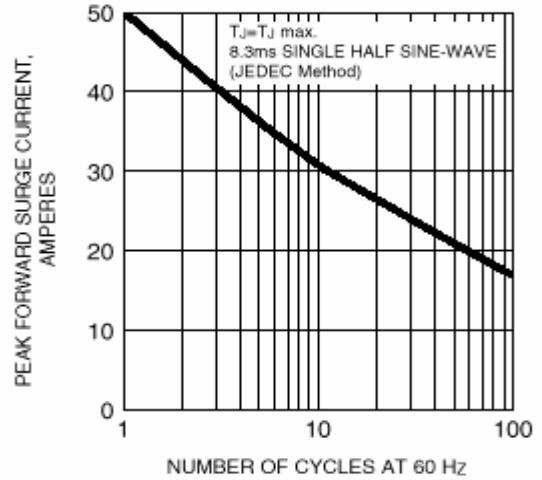
- Reverse Recovery Condition  $I_f = 0.5\text{A}$ ,  $I_r = 1.0\text{A}$ ,  $I_{rr} = 0.25\text{A}$
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 3/8" lead length, P.C. Board Mounted

## RATINGS AND CHARACTERISTIC CURVES RG1.5J

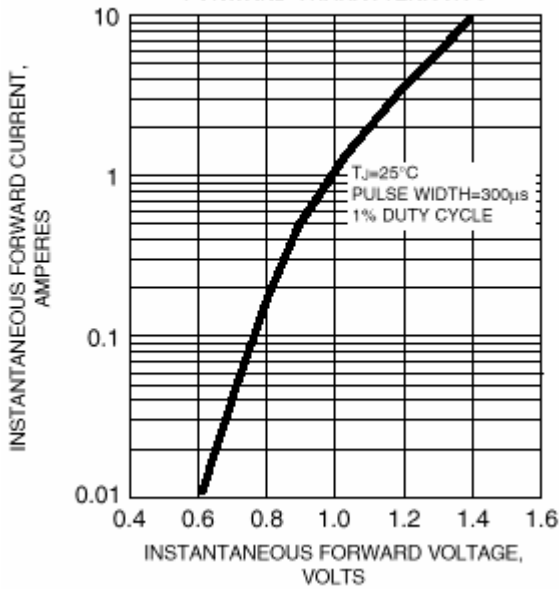
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



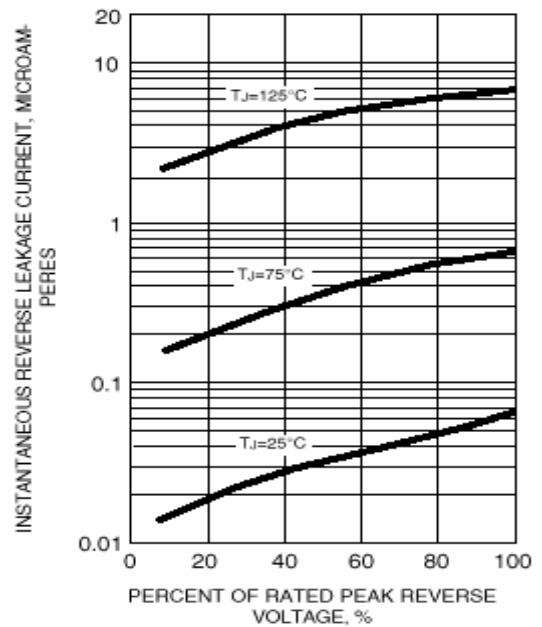
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**

