

# BYW76

## SINTERED GLASS JUNCTION FAST AVALANCHE RECTIFIER

VOLTAGE: 600V

CURRENT: 3.0A



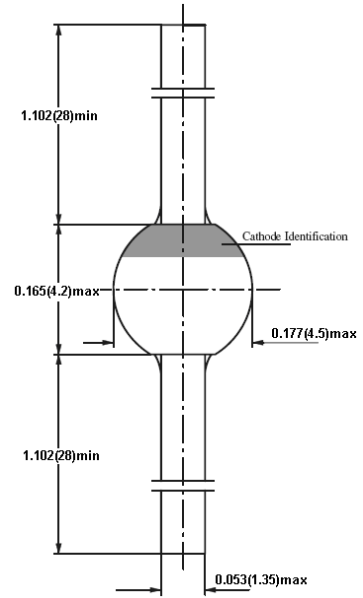
### FEATURE

Glass passivated  
Low reverse current  
Soft recovery characteristics  
Guaranteed avalanche energy absorption capability

### MECHANICAL DATA

Case: SOD-64 sintered glass case  
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
Polarity: color band denotes cathode end  
Mounting position: any

### SOD-64



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	BYW76	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 $T_a = 80^\circ\text{C}$	$I_{FAV}$	3.0	A
Peak Forward Surge Current at $T_p=10\text{ms}$ half sinewave	$I_{FSM}$	100	A
Maximum Forward Voltage at rated Forward Current	$V_F$	1.10	V
Non-repetitive peak reverse avalanche energy at $I_{(BR)R}=0.4\text{A}$	$E_{RSM}$	10	mJ
Maximum DC Reverse Current at rated DC blocking voltage	$I_R$	5.0 150.0	$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	200	nS
Typical Thermal Resistance (Note 2)	$R_{th(ja)}$	25	$^\circ\text{C/W}$
Storage and Operating Junction Temperature	$T_{stg}, T_j$	-55 to +175	$^\circ\text{C}$

Note:

1. Reverse Recovery Condition  $I_f = 0.5\text{A}$ ,  $I_r = 1.0\text{A}$ ,  $I_{rr} = 0.25\text{A}$
2.  $l = 10\text{mm}$ ,  $T_L = \text{constant}$

## RATINGS AND CHARACTERISTIC CURVES BYW76

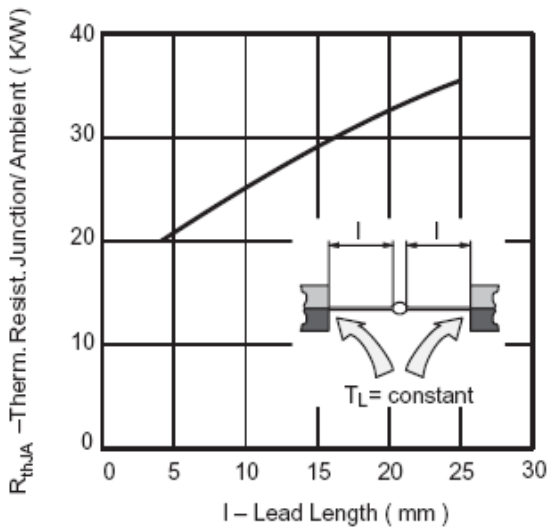


Figure 1. Max. Thermal Resistance vs. Lead Length

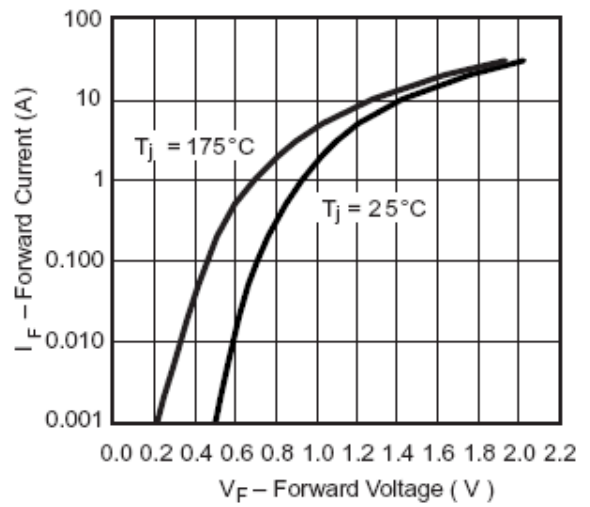


Figure 2. Forward Current vs. Forward Voltage

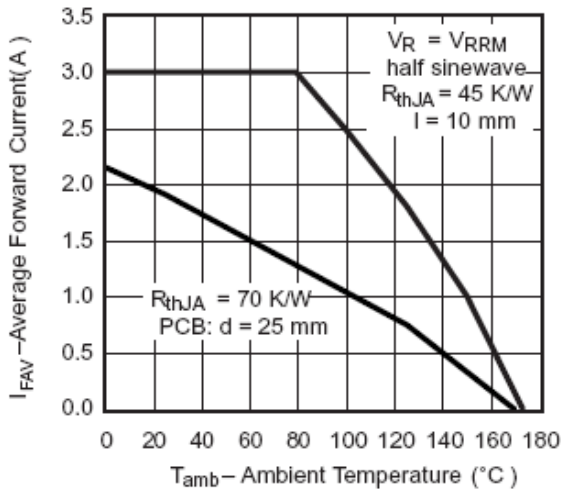


Figure 3. Max. Average Forward Current vs. Ambient Temperature

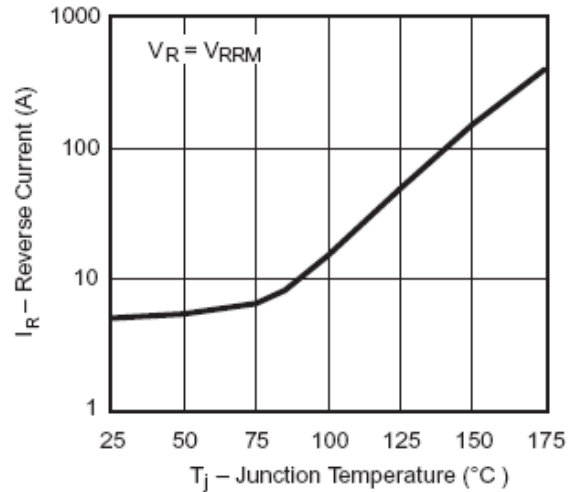


Figure 4. Reverse Current vs. Junction Temperature

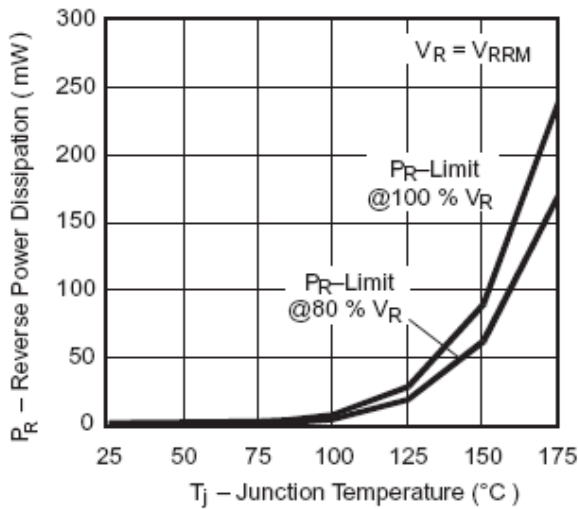


Figure 5. Max. Reverse Power Dissipation vs. Junction Temperature

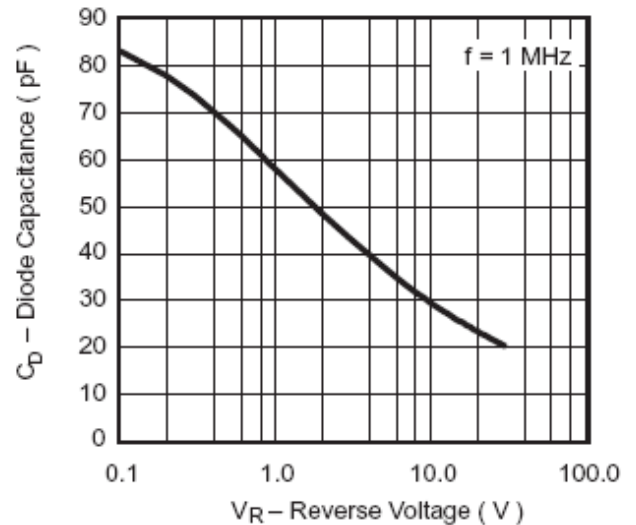


Figure 6. Diode Capacitance vs. Reverse Voltage