

# BYW178

## SINTERED GLASS JUNCTION FAST AVALANCHE RECTIFIER

VOLTAGE: 800V

CURRENT: 3.0A



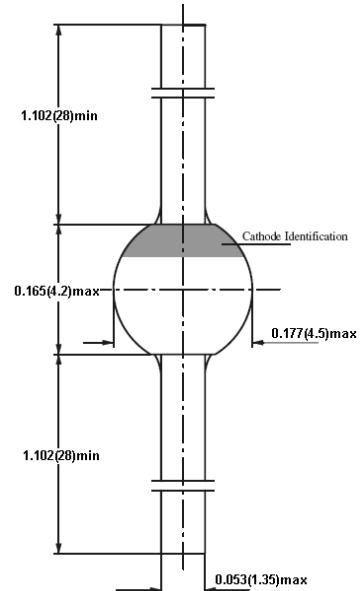
### FEATURE

Glass passivated junction  
Low reverse current  
Soft recovery characteristics  
Very fast reverse recovery time  
Low reverse recovery peak current

### 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 millimeters

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	BYW178	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	800	V
Maximum RMS Voltage	$V_{RMS}$	560	V
Maximum DC blocking Voltage	$V_{DC}$	800	V
Reverse Breakdown Voltage at $I_R = 0.1\text{mA}$	$V_{(BR)R}$	1100min	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current at $t_p=10\text{ms}$ half sinewave	$I_{FSM}$	80	A
Maximum Forward Voltage at rated Forward Current and 25°C	$V_F$	1.90	V
Maximum DC Reverse Current at rated DC blocking voltage	$I_R$	1.0 20	$\mu\text{A}$ $\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	60	nS
Typical Thermal Resistance (Note 2)	$R_{th(ja)}$	70	K/W
Storage and Operating Junction Temperature	$T_{stg}, T_j$	-55 to +175	°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. on PC board with spacing 37.5mm

## RATINGS AND CHARACTERISTIC CURVES BYW178

