

BY228

Standard Avalanche Sinterglass Diode

Features

- Glass passivated junction
- Hermetically sealed package

Applications

High voltage rectification
Efficiency diode in horizontal deflection circuits

Mechanical Data

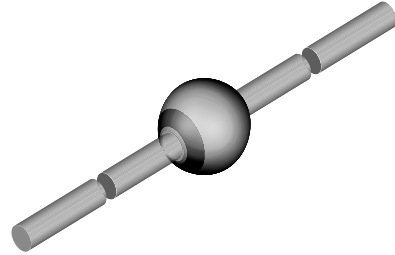
Case: Sintered glass case, SOD 64

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 860 mg, (max. 1000 mg)



949588

Parts Table

Part	Type differentiation	Package
BY228	$V_R = 1500 \text{ V}; I_{FAV} = 3 \text{ A}$	SOD64

Absolute Maximum Ratings

$T_{amb} = 25 \text{ }^\circ\text{C}$, unless otherwise specified

Parameter	Test condition	Sub type	Symbol	Value	Unit
Reverse voltage	see electrical characteristics		V_R	1500	V
Repetitive peak reverse voltage	$I_R = 100 \text{ } \mu\text{A}$		V_{RRM}	1650	V
Peak forward surge current	$t_p = 10 \text{ ms}$, half sinewave		I_{FSM}	50	A
Average forward current			I_{FAV}	3	A
Junction temperature			T_j	140	$^\circ\text{C}$
Storage temperature range			T_{stg}	-55 to +175	$^\circ\text{C}$
Non repetitive reverse avalanche energy	$I_{(BR)R} = 0.4 \text{ A}$		E_R	10	mJ

Maximum Thermal Resistance

$T_{amb} = 25 \text{ }^\circ\text{C}$, unless otherwise specified

Parameter	Test condition	Sub type	Symbol	Value	Unit
Junction ambient	on PC board with spacing 25 mm		R_{thJA}	70	K/W

Electrical Characteristics
 $T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified

Parameter	Test condition	Sub type	Symbol	Min	Typ.	Max	Unit
Forward voltage	$I_F = 5\text{ A}$		V_F			1.5	V
Reverse current	$V_R = 1500\text{ V}$		I_R		2	5	μA
	$V_R = 1500\text{ V}, T_j = 140\text{ }^{\circ}\text{C}$		I_R			140	μA
Total Reverse recovery time	$I_F = 1\text{ A}, -di_F/dt = 0.05\text{ A}/\mu\text{s}$		t_{rr}			20	μs
Reverse recovery time	$I_F = 0.5\text{ A}, I_R = 1\text{ A}, i_R = 0,25\text{ A}$		t_{rr}			2	μs

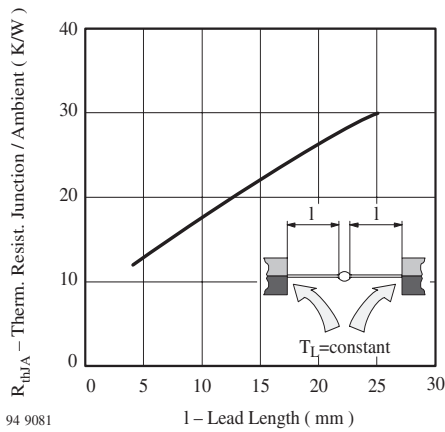
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)


Figure 1. Typ. Thermal Resistance vs. Lead Length

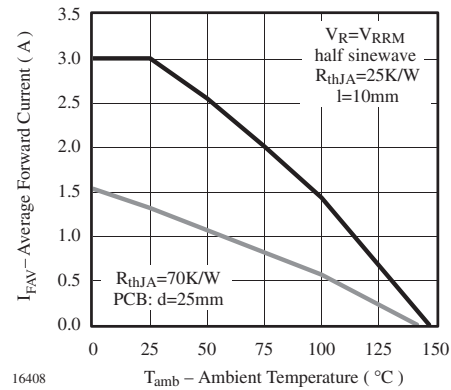


Figure 3. Max. Average Forward Current vs. Ambient Temperature

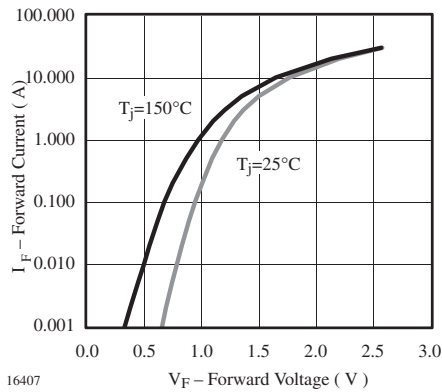


Figure 2. Forward Current vs. Forward Voltage

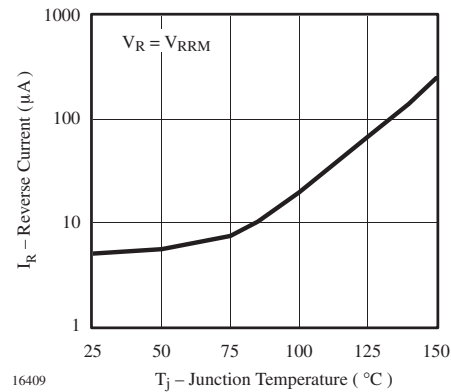


Figure 4. Reverse Current vs. Junction Temperature

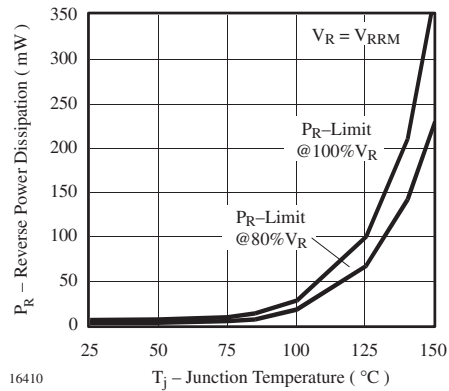


Figure 5. Max. Reverse Power Dissipation vs. Junction Temperature

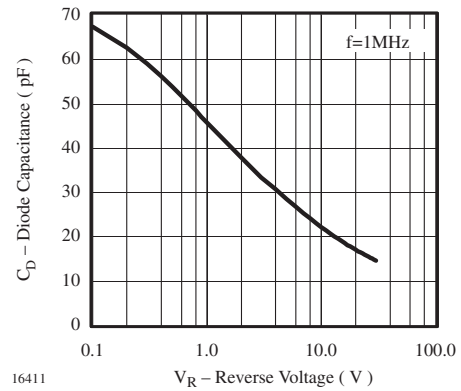


Figure 6. Diode Capacitance vs. Reverse Voltage

Package Dimensions in mm
