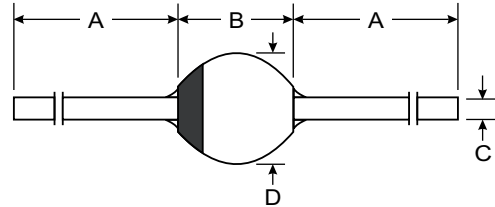


**Features**

- Hermetically Sealed Glass Body Construction
- Controlled Avalanche Characteristics
- Super-Fast Switching for High Efficiency
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 90A Peak
- Low Reverse Leakage Current



**Mechanical Data**

- Case: SOD-64, Glass
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

SOD-64		
Dim	Min	Max
A	26.0	—
B	—	4.2
C	—	1.35
D	—	4.3
All Dimensions in mm		

**Maximum Ratings and Electrical Characteristics** @ T<sub>j</sub> = 25°C unless otherwise specified

Characteristic	Symbol	BYV28/50	BYV28/100	BYV28/150	BYV28/200	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	150	200	V
Working Peak Reverse Voltage	V <sub>RWM</sub>					
DC Blocking Voltage	V <sub>R</sub>					
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	100	140	V
Non-Repetitive Peak Reverse Voltage	V <sub>RSM</sub>	55	110	165	220	V
Average Rectified Output Current (Note 1)	I <sub>O</sub>	3.5				A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	90				A
Repetitive Forward Surge Current	I <sub>FRM</sub>	25				A
Forward Voltage @ I <sub>F</sub> = 5.0A	V <sub>FM</sub>	1.1				V
Peak Reverse Current @ T <sub>j</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>j</sub> = 165°C	I <sub>RM</sub>	1.0 150				μA
Non-Repetitive Reverse Avalanche Energy I <sub>R</sub> = 0.6A Inductive Load @ T <sub>j</sub> = 175°C	E <sub>RSM</sub>	20				mJ
Reverse Recovery Time (Note 2)	t <sub>rr</sub>	30				ns
Typical Thermal Resistance Junction to Ambient (Note 1)	R <sub>θJA</sub>	25				K/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +175				°C

Notes: 1. Leads maintained at ambient temperature at a distance of 10mm from the case.  
2. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A. See Figure 4.

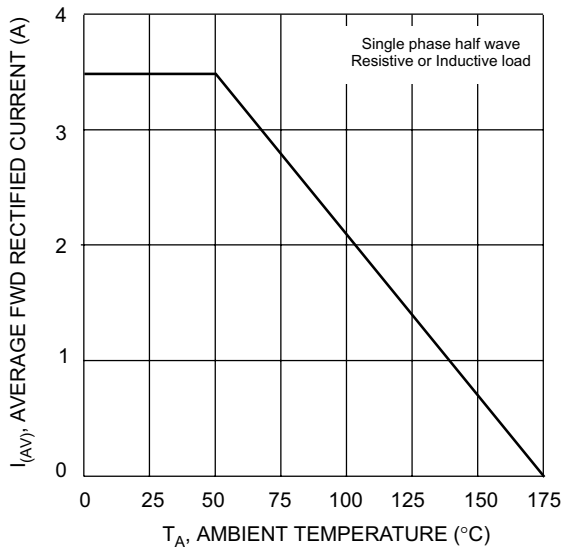


Fig. 1 Forward Current Derating Curve

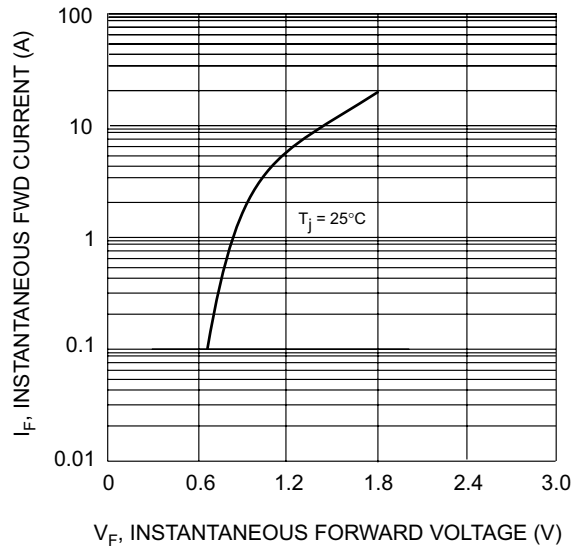


Fig. 2 Typical Forward Characteristics

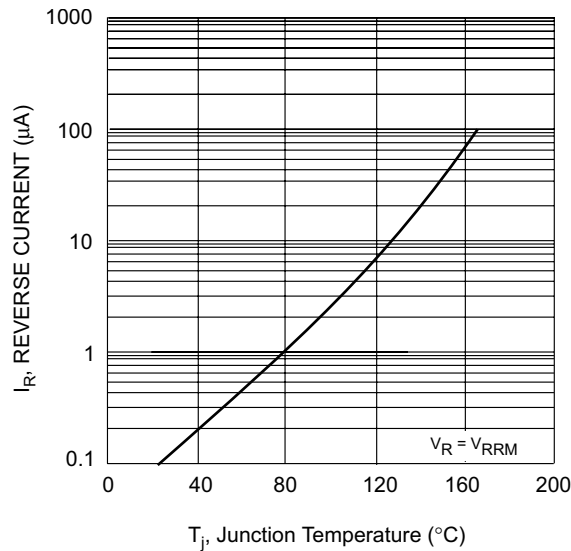
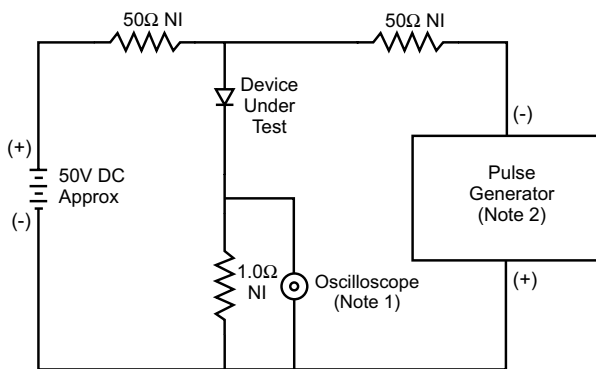


Fig. 3 Typical Reverse Characteristics



- Notes:
1. Rise Time = 7.0ns max. Input impedance = 1.0MΩ, 22pF.
  2. Rise Time = 10ns max. Input impedance = 50Ω.

Set time base for 50/100 ns/cm

Fig. 4 Reverse Recovery Time Characteristic and Test Circuit