

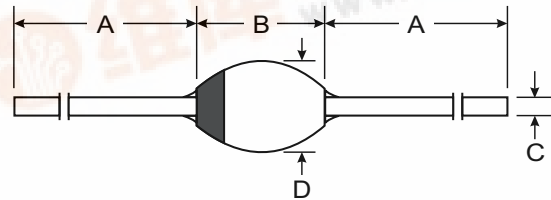


BY268 / BY269

0.8A FAST RECOVERY HIGH VOLTAGE GLASS BODY RECTIFIER

Features

- Hermetically Sealed Glass Body Construction
- High Voltage to 1800V with Low Leakage
- Surge Overload Rating to 20A Peak



Mechanical Data

- Case: SOD-57, Glass
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.50 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

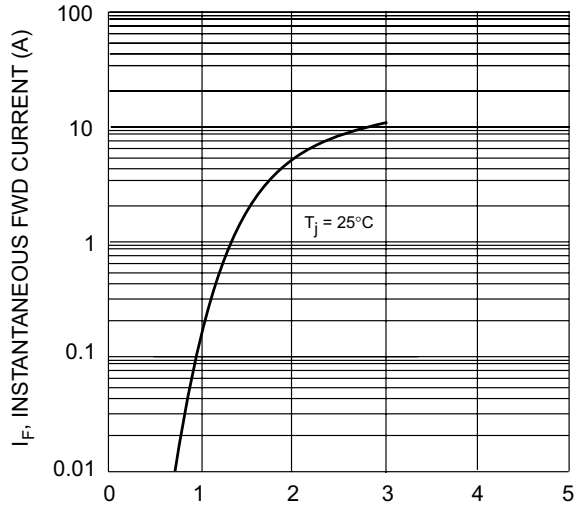
SOD-57		
Dim	Min	Max
A	26.0	—
B	—	4.2
C	—	0.82
D	—	3.6
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_j = 25^\circ\text{C}$ unless otherwise specified

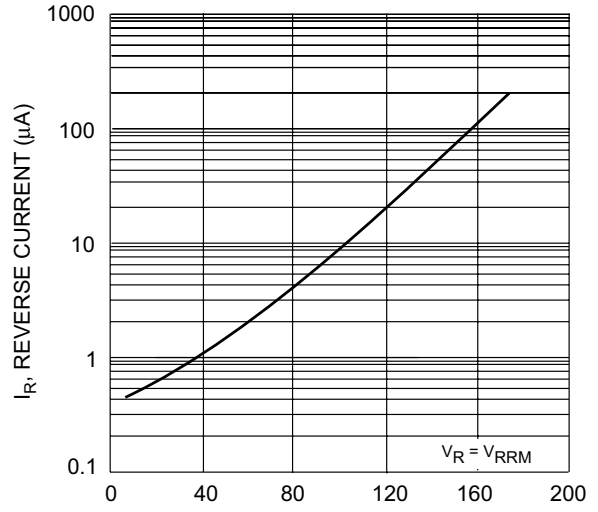
Characteristic	Symbol	BY268	BY269	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	1400	1600	V
Working Peak Reverse Voltage	V_{RWM}			
DC Blocking Voltage	V_R			
RMS Reverse Voltage	$V_{R(RMS)}$	980	1120	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	1600	1800	V
Average Rectified Output Current (Note 1)	I_O	800		mA
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	20		A
Forward Voltage @ $I_F = 400\text{mA}$	V_{FM}	1.25		V
Peak Reverse Leakage Current @ $T_j = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_j = 100^\circ\text{C}$	I_{RM}	2.0 15		μA
Reverse Recovery Time (Note 2)	t_{rr}	400		ns
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	110		K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +175		$^\circ\text{C}$

- Notes:
1. Valid provided that leads are kept at ambient temperature at a distance of 25mm from the case.
 2. Measured with $I_F = 1.0\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$. See Figure 4.

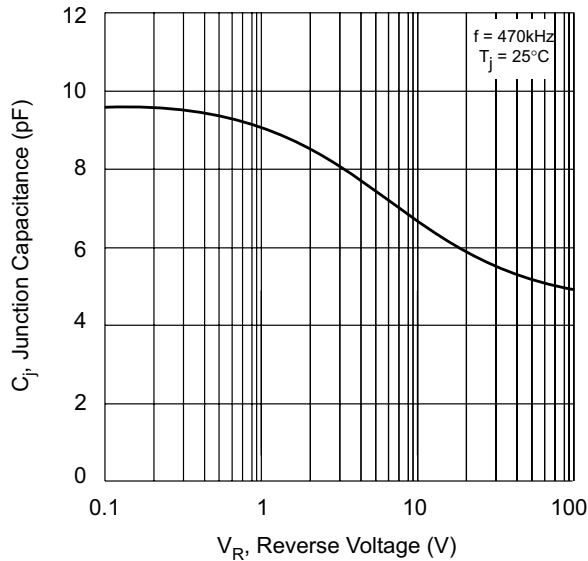




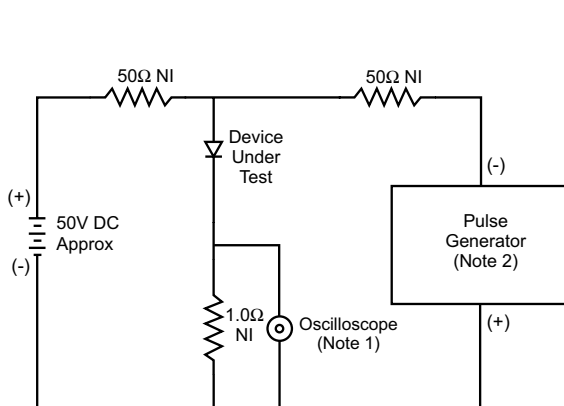
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 1 Typical Forward Characteristics



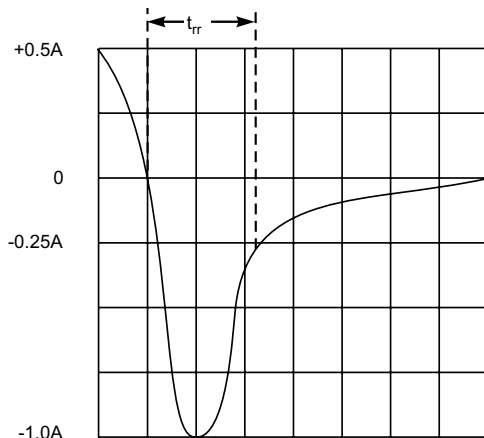
T_j , Junction Temperature ($^\circ\text{C}$)
Fig. 2 Typical Reverse Characteristics



V_R , Reverse Voltage (V)
Fig. 3 Typical Junction Capacitance



- Notes:
1. Rise Time = 7.0ns max. Input impedance = $1.0\text{M}\Omega$, 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