

## BYV95-0 THRU BYV95-4

### SINTERED GLASS JUNCTION FAST AVALANCHE RECTIFIER

VOLTAGE: 600 TO 1000V

CURRENT: 1.5A



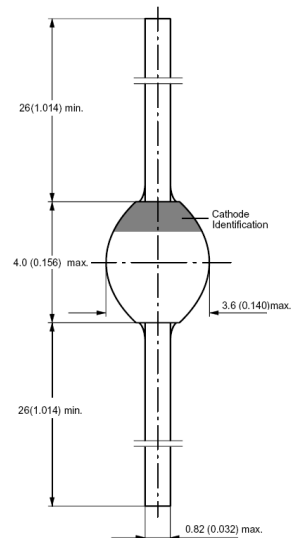
#### FEATURE

Glass passivated  
Hermetically sealed axial-leaded glass envelope  
Low reverse current  
High reverse voltage  
Guaranteed avalanche characteristics

#### MECHANICAL DATA

Case: SOD-57 sintered glass case  
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
Polarity: color band denotes cathode end  
Mounting position: any

#### SOD-57



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	BYV95-0	BYV95-1	BYV95-2	BYV95-3	BYV95-4	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	700	750	850	1000	V
Maximum RMS Voltage	$V_{RMS}$	420	490	525	595	700	V
Maximum DC blocking Voltage	$V_{DC}$	600	700	750	850	1000	V
Reverse Breakdown Voltage at $I_R = 100\mu A$	$V_{(BR)R}$	700min 800max	800min 900max	850min 950max	950min 1100max	1100min 1300max	V
Maximum Reverse Avalanche Voltage at $I_R = 1.5A/5\mu s$	$V_{AVAL}$	900	1000	1050	1200	1400	V
Maximum Average Forward Rectified Current	$I_{FAV}$	1.5					A
Peak Forward Surge Current at $T_p=10ms$ half sine wave	$I_{FSM}$	35.0					A
Maximum Forward Voltage at rated Forward Current and 25°C $I_F = 1.0A$	$V_F$	1.60					V
Maximum DC Reverse Current $T_a = 25^\circ C$ at rated DC blocking voltage $T_a = 150^\circ C$	$I_R$	1.0 150					$\mu A$ $\mu A$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	250				300	nS
Non Repetitive Reverse Avalanche Energy at $I_{BR(R)} = 2.5A$	$E_R$	10					mJ
Typical Thermal Resistance (Note 2)	$R_{thJA}$	45					K/W
Storage and Operating Junction Temperature	$T_{stg}, T_j$	-55 to +175					°C

Note:

- Reverse Recovery Condition  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{RR} = 0.25A$
- lead length  $l=10mm$

Rev.A1

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RATINGS AND CHARACTERISTIC CURVES BYV95-0 THRU BYV95-4

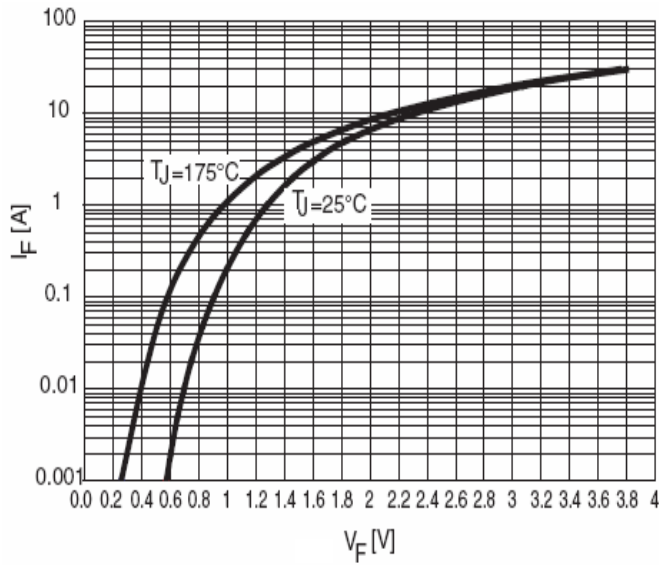


Figure 1. Maximum Forward Voltage

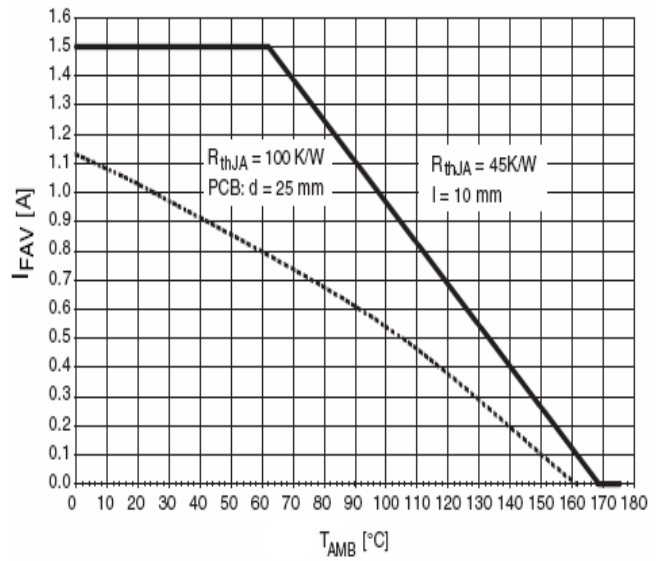


Figure 2. Maximum Average Forward Current

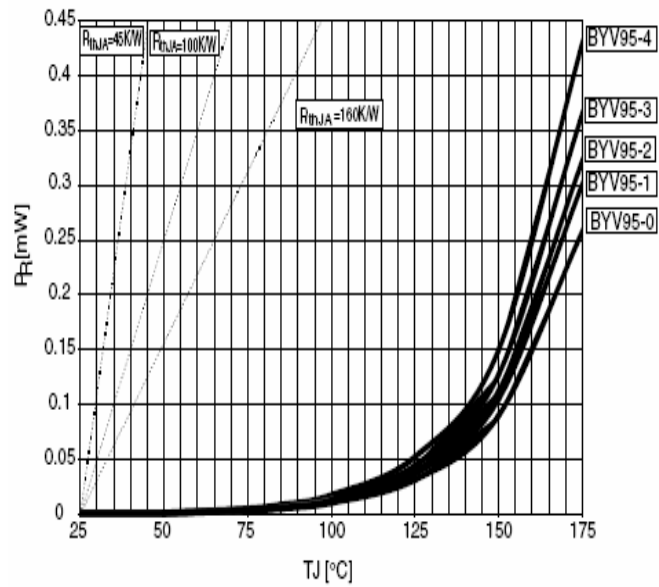


Figure 3. Maximum Reverse Power Dissipation

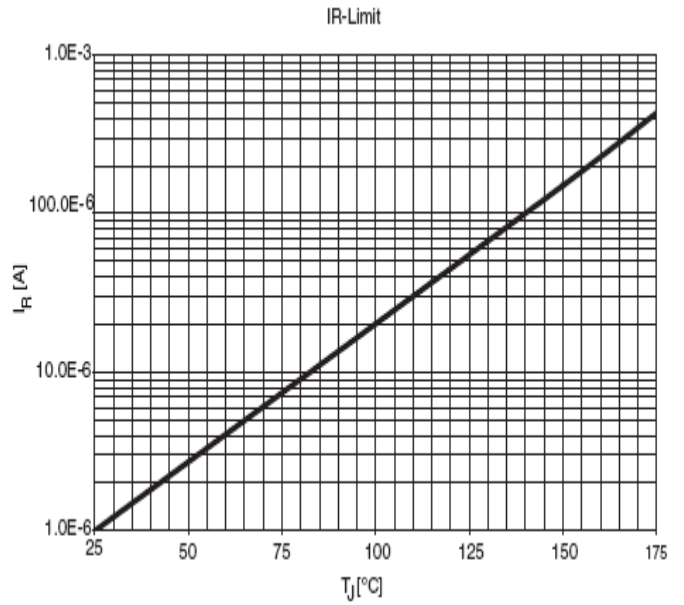


Figure 4. Maximum Reverse Current