

BYV95A

SINTERED GLASS JUNCTION FAST AVALANCHE RECTIFIER

VOLTAGE: 200V

CURRENT: 1.5A



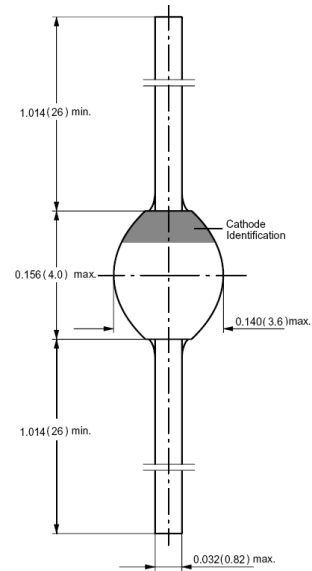
FEATURE

Glass passivated
High maximum operating temperature
Low leakage current
Excellent stability
Guaranteed avalanche energy absorption capability

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	BYV95A	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS Voltage	V_{RMS}	140	V
Maximum DC blocking Voltage	V_{DC}	200	V
Reverse Breakdown Voltage at $I_R = 0.1mA$	$V_{(BR)R}$	300min	V
Maximum Average Forward Rectified Current 3/8"lead length at $T_a = 65^\circ C$	$I_{F(AV)}$	1.5	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	35	A
Maximum Forward Voltage at $I_F = 3.0A$ and $25^\circ C$	V_F	1.6	V
Maximum DC Reverse Current at rated DC blocking voltage $T_j = 25^\circ C$ $T_j = 150^\circ C$	I_R	5.0 150	μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	250	nS
Non Repetitive Reverse Avalanche Energy (Note 2)	E_R	10	mJ
Typical Junction Capacitance (Note 3)	C_j	45	pF
Typical Thermal Resistance (Note 4)	$R_{th(ja)}$	46	K/W
Storage and Operating Junction Temperature	T_{stg}, T_j	-65 to +175	$^\circ C$

Note:

1. Reverse Recovery Condition $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$
2. $L = 120 mH$; $T_j = T_j \text{ max}$ prior to surge; inductive load switched off
3. Measured at 1.0 MHz and applied reverse voltage of 4Vdc
4. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES BYV95A

FIG. 1 - FORWARD CURRENT DERATING CURVE

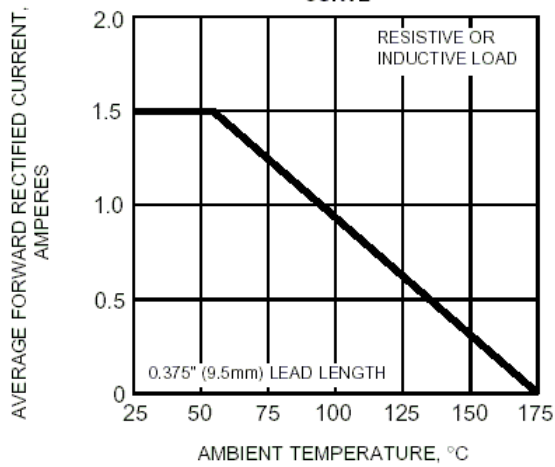


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

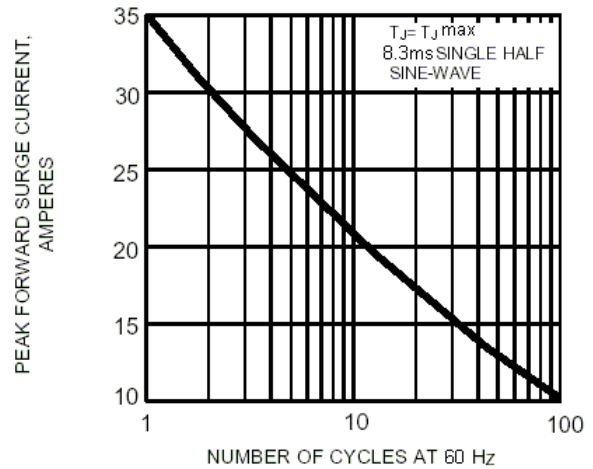


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

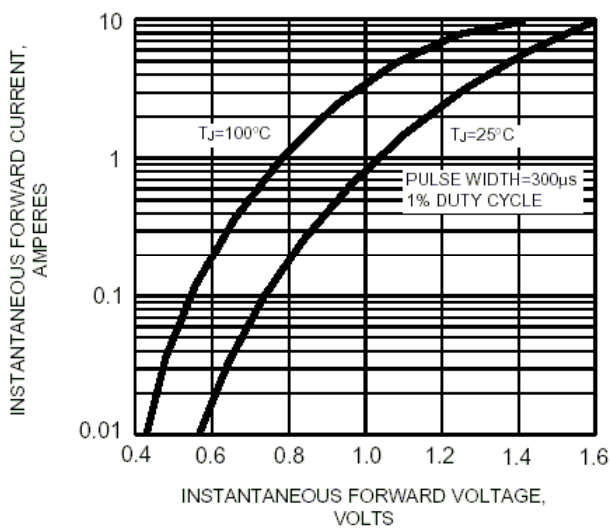


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

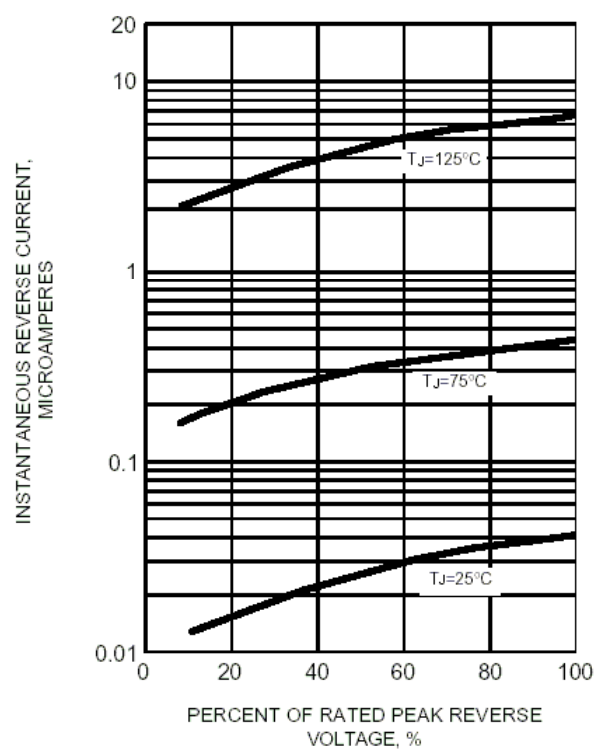


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

