

FE1.5M

**SINTERED GLASS JUNCTION
ULTRAFAST AVALANCHE RECTIFIER**
VOLTAGE: 1000V CURRENT: 1.5A



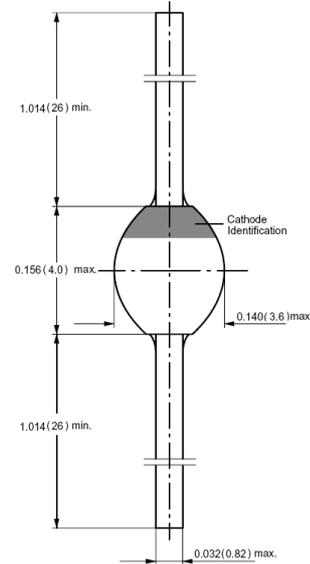
FEATURE

Glass passivated
Hermetically sealed package
Low reverse current
Soft recovery 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 inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	FE1.5M	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at $T_L=55^\circ C$	I_{FAV}	1.5	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50	A
Maximum Forward Voltage at rated Forward Current and 25°C	V_F	1.8	V
Maximum DC Reverse Current at rated DC blocking voltage $T_a = 25^\circ C$ $T_a = 100^\circ C$	I_R	5.0 100	μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	53	nS
Typical Junction Capacitance (Note 2)	C_j	30.0	pF
Typical Thermal Resistance (Note 3)	$R_{th(ja)}$	45.0	$^\circ C/W$
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. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES FE1.5M

FIG. 1 - FORWARD CURRENT DERATING CURVE

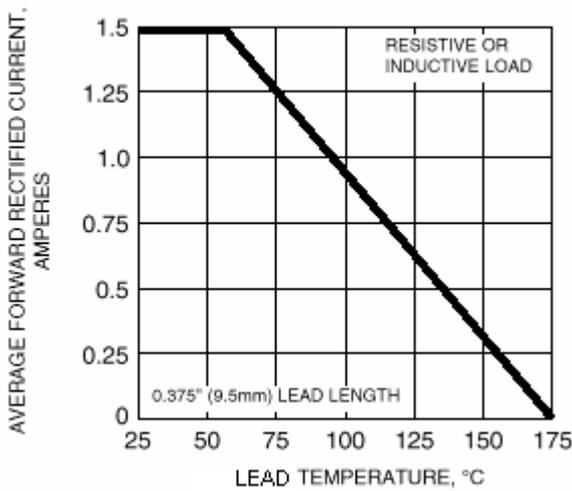


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

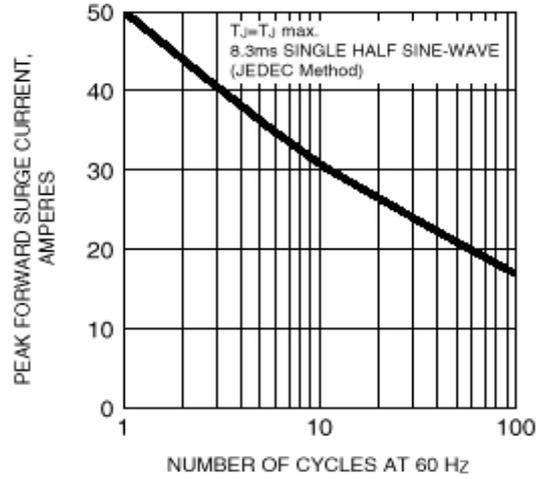


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

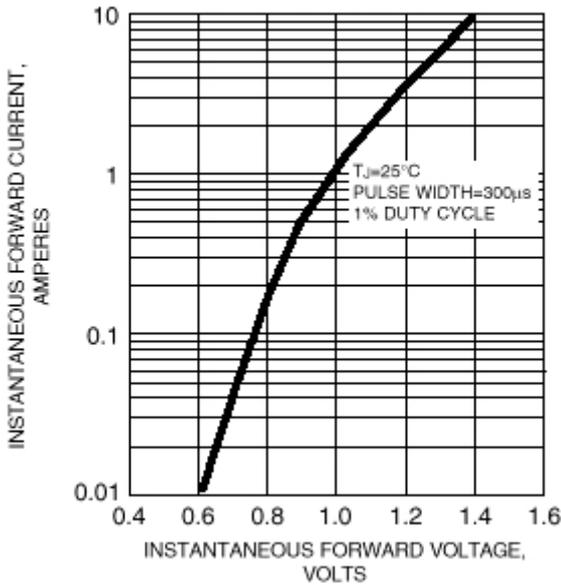


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

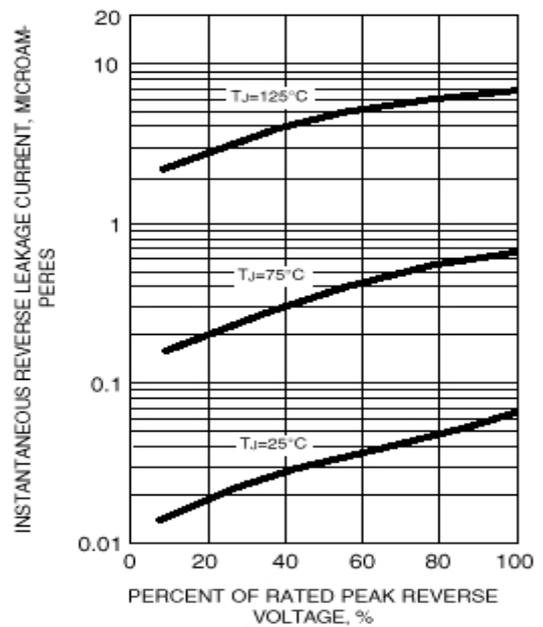


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

