FE4M

SINTERED GLASS JUNCTION
ULTRAFAST AVALANCHE RECTIFIER

VOLTAGE：1000V **CURRENT: 3.0A**

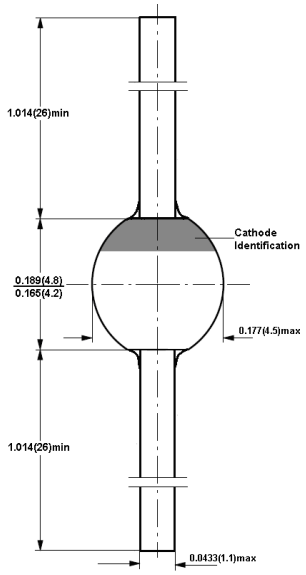
FEATURE

Glass passivated
Hermetically sealed package
Low reverse current
Soft recovery characteristics

MECHANICAL DATA

Case: G-4 sintered glass case
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Polarity: color band denotes cathode end
Mounting position: any

G-4



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	FE4M	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 Ta=55℃	I_{FAV}	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100	A
Maximum Forward Voltage at rated Forward Current and 25℃	V_F	1.75	V
Maximum DC Reverse Current Ta=25℃ at rated DC Blocking Voltage Ta=100℃	I_R	5.0 100	μA
Maximum Reverse Recovery Time (Note 1)	Trr	50	nS
Typical Junction Capacitance (Note 2)	Cj	100.0	pF
Typical Thermal Resistance (Note 3)	Rth(ja)	20.0	℃ /W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175	℃

Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =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 FE4M

FIG. 1 - FORWARD CURRENT DERATING CURVE

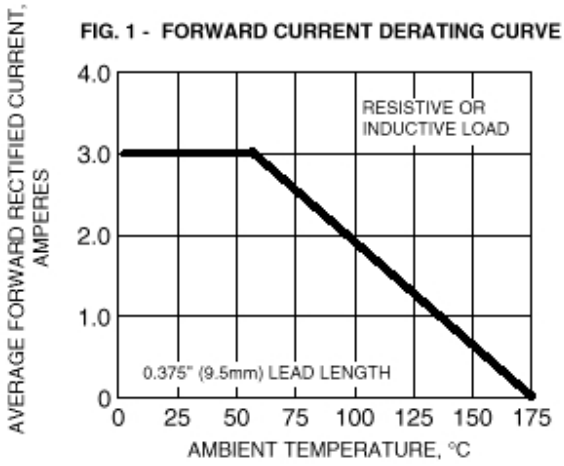


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

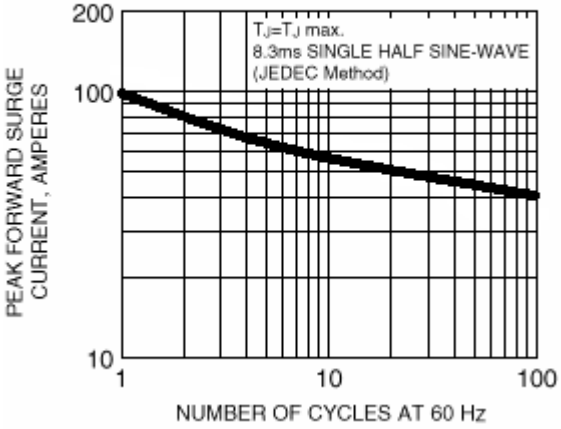


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

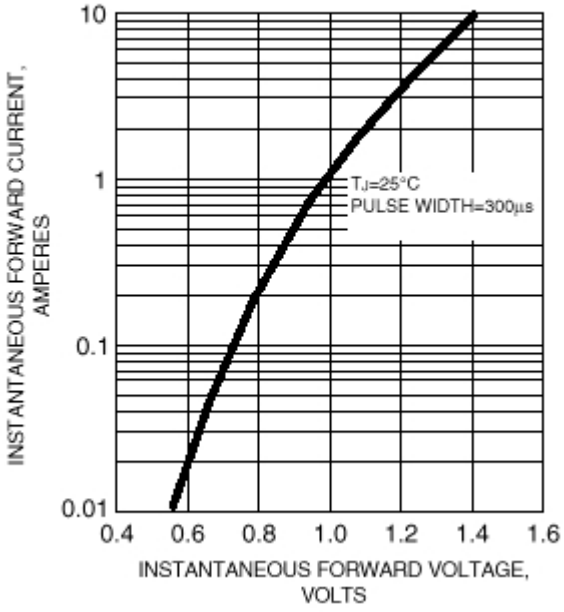


FIG. 4 - TYPICAL REVERSE CHARACTERISTIC

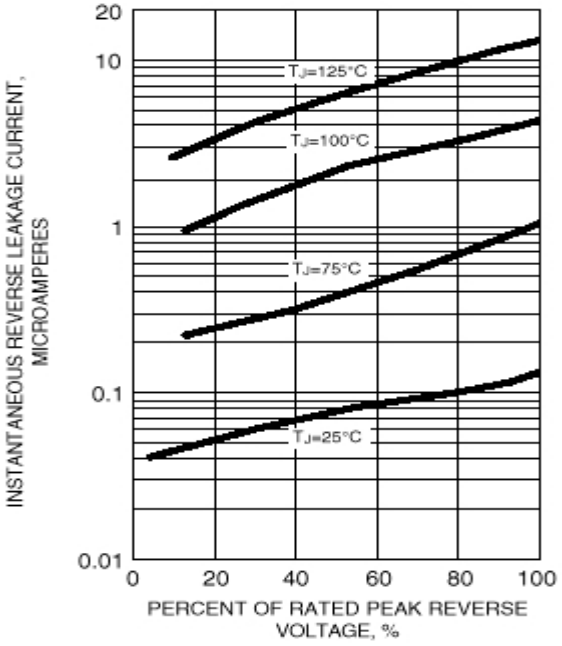


FIG. 5 - TYPICAL JUNCTION CAPACITANCE