

FE4J

SINTERED GLASS JUNCTION FAST AVALANCHE RECTIFIER

VOLTAGE: 600V

CURRENT: 3.0A

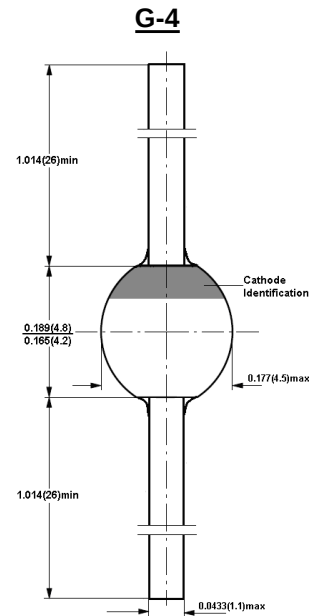


FEATURE

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



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	FE4J	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta=55°C	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°C	V_F	1.6	V
Maximum DC Reverse Current at V_{DC} =600V and 25°C	I_R	5.0	μA
Maximum DC Reverse Current at V_{DC} =650V and 25°C	I_R	5.0	μA
Maximum DC Reverse Current at V_{DC} =700V and 25°C	I_R	25.0	μA
Maximum DC Reverse Current at V_{DC} =600V and 100°C	I_R	100	μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	35	nS
Typical Junction Capacitance (Note 2)	C_j	100.0	pF
Typical Thermal Resistance (Note 3)	$R_{th(ja)}$	20.0	°C /W
Storage and Operating Junction Temperature	T_{stg}, T_j	-65 to +175	°C

Note:

- Reverse Recovery Condition $I_f = 0.5A$, $I_r = 1.0A$, $I_{rr} = 0.25A$
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES FE4J

FIG. 1 - FORWARD CURRENT DERATING CURVE

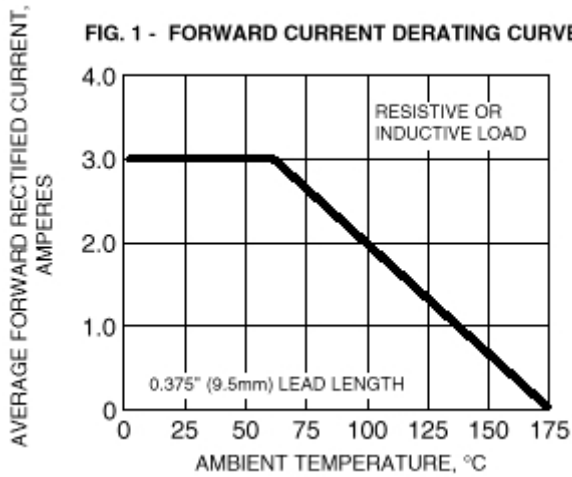


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

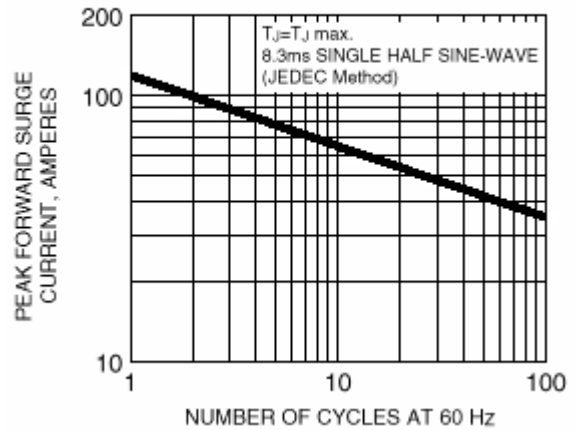


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

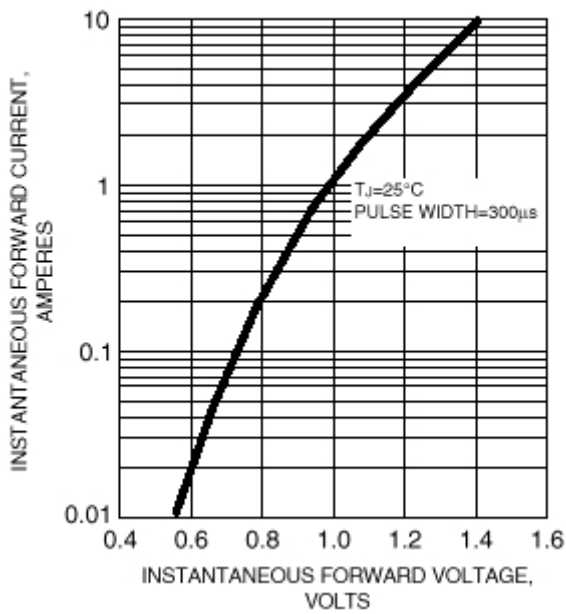


FIG. 4 - TYPICAL REVERSE CHARACTERISTIC

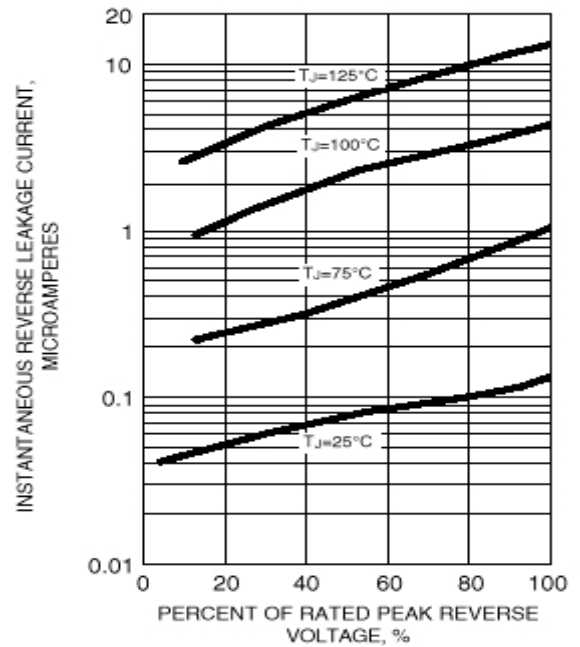


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

