

FEATURES

- For Surface Mount Application
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Glass Passivated Junction
- Super Fast Recovery Time For High Efficiency

MECHANICAL DATA

Case: SOD-123FL

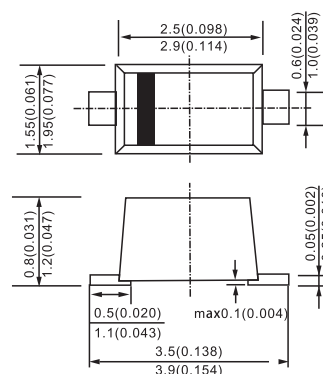
Epoxy meets UL 94V-0 flammability rating

Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD22-B102

E3 suffix for consumer grade, meets JESD 201 class 1A whisker test, HE3 suffix for high reliability grade (AEC Q101 qualified), meets JESD 201 class 2 whisker test

Polarity: Color band denotes cathode end

SOD-123FL



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FSM11PL	F1	50V	35V	50V
FSM12PL	F2	100V	70V	100V
FSM13PL	F3	200V	140V	200V
FSM14PL	F4	400V	280V	400V
FSM15PL	F5	600V	420V	600V
FSM16PL	F6	800V	560V	800V

Average Forward Current	$I_{F(AV)}$	1.0 A	$T_L = 110$
Peak Forward Surge Current	I_{FSM}	30.0A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.3V	$I_{FM} = 1.0A$; $T_A = 25$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0 A	$T_A = 25$
Maximum Reverse Recovery Time FSM11PL-14PL FSM15PL FSM16PL	T_{rr}	100uA 150ns 250ns 500ns	$T_A=55$ $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.25A$
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz, $V_R=4.0V$

TESTING AND CHARACTERISTIC CURVES FSM11PL THRU FSM16PL

Figure 1 Typical Reverse Characteristics

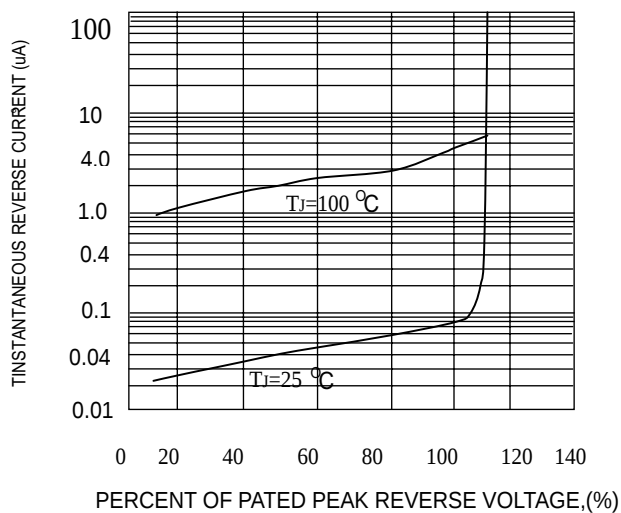


Figure 2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

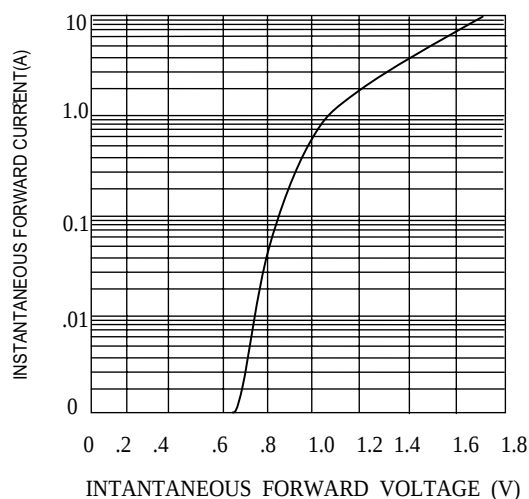


Figure 3

NON-REPETITIVE FORWARD SURGE CURRENT

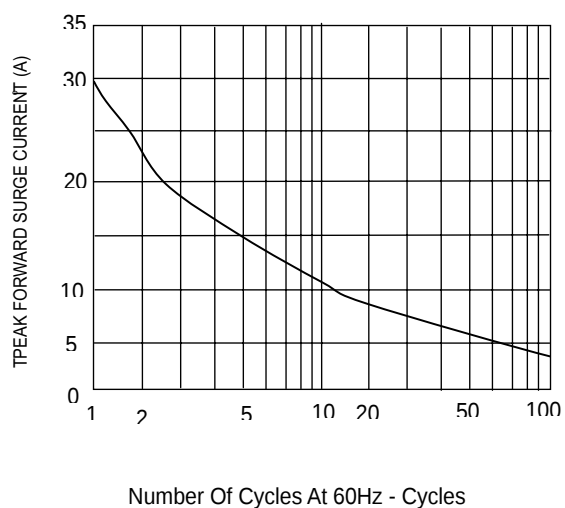


Figure 4 TYPICAL CAPACITANCE

