

FSM11PL THRU FSM17PL



1.0 Amp Fast Recovery Rectifier

Features

- For Surface Mount Application
- Case Material : Molded Palstic. UL Flammability Classification Rating 94V-0 and MSL rating 1
- Glass Passivated Junction
- Fast Recovery Time For High Efficiency
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

Maximum Ratings

- Operating Temperature(T_J): -65°C to $+150^{\circ}\text{C}$
- Storage Temperature(T_{STG}): -65°C to $+150^{\circ}\text{C}$
- Maximum Thermal Resistance(R_{thJA}): $75^{\circ}\text{C}/\text{W}^*$

MCC 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
FSM17PL	F7	1000V	700V	1000V

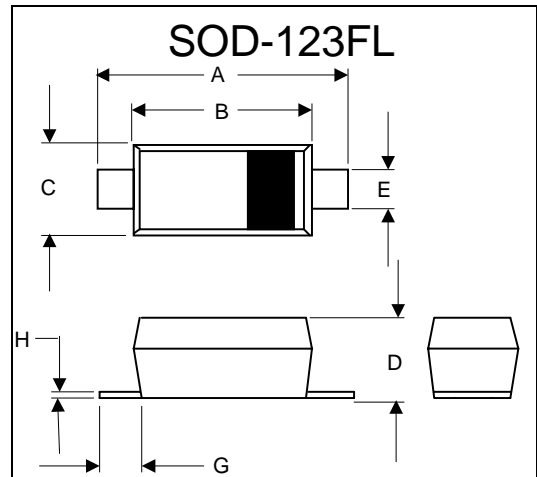
Electrical Characteristics @ 25°C Unless Otherwise Specified

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

*6.0mm² copper pads to each terminal

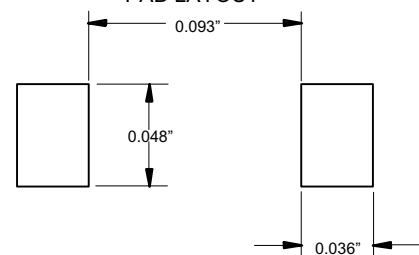
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

1.0 Amp Fast Recovery Rectifier 50 to 1000 Volts



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	.037	.053	0.95	1.35	
E	.020	.039	0.50	1.00	
G	.010	-----	0.25	-----	
H	-----	.008	-----	.20	

SUGGESTED SOLDER PAD LAYOUT



FSM11PL-FSM17PL

Figure 1
Typical Reverse Characteristics

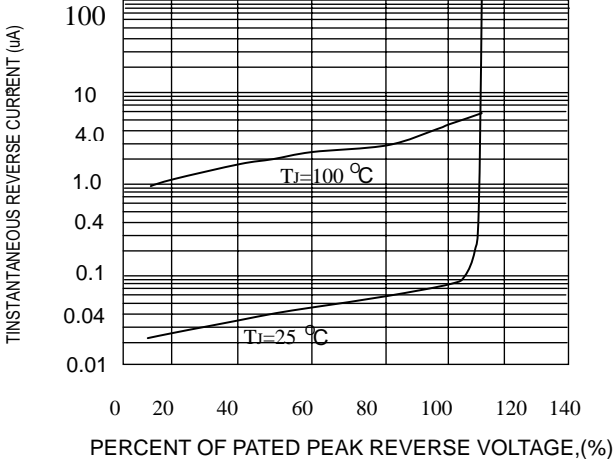


Figure 2
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

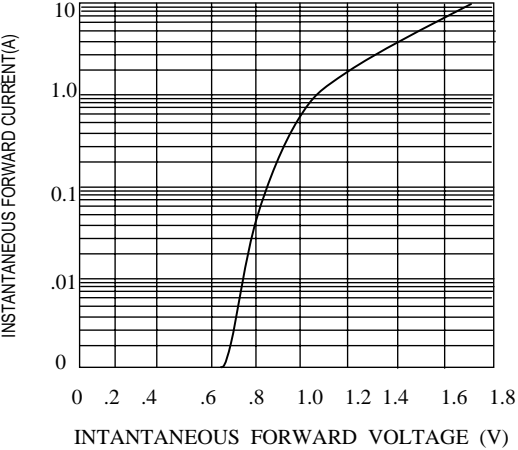


Figure 3
NON-REPETITIVE FORWARD SURGE CURRENT

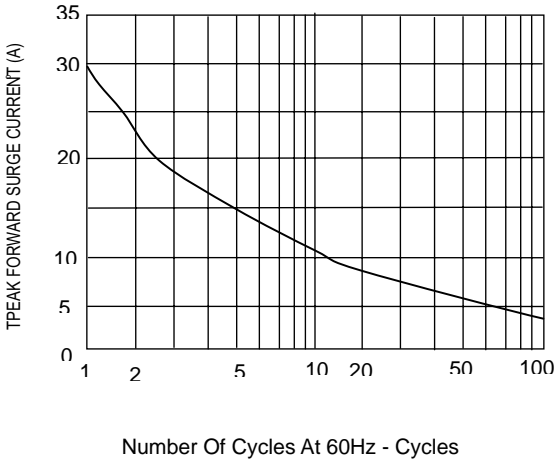


Figure 4
TYPICAL CAPACITANCE

