



Micro Commercial Components



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## FSM11PL THRU FSM17PL

### Features

- For Surface Mount Application
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"
- Glass Passivated Junction
- Fast Recovery Time For High Efficiency
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

### 1.0 Amp Fast Recovery Rectifier 50 to 1000 Volts

### Maximum Ratings

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

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

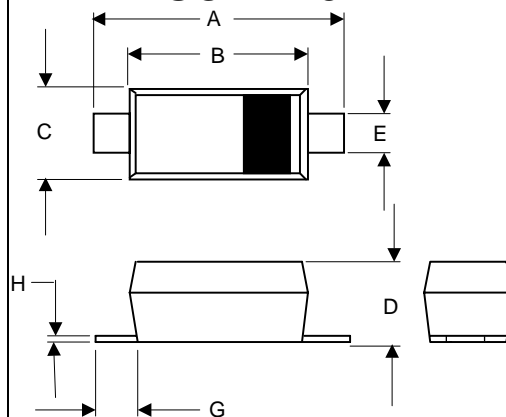
### Electrical Characteristics @ $25^{\circ}\text{C}$ Unless Otherwise Specified

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 $\mu\text{A}$ 100 $\mu\text{A}$	$T_A = 25^{\circ}\text{C}$ $T_A = 125^{\circ}\text{C}$
Maximum Reverse Recovery Time FSM11PL-14PL FSM15PL FSM16PL-17PL	$T_{rr}$	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, $V_R = 4.0\text{V}$

\*6.0mm<sup>2</sup> copper pads to each terminal

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

### SOD-123FL



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.122	2.55	3.10	
C	.055	.075	1.40	1.90	
D	.035	.053	0.90	1.35	
E	.020	.041	0.50	1.05	
G	.010	----	0.25	----	
H	----	.010	----	.25	

### SUGGESTED SOLDER PAD LAYOUT

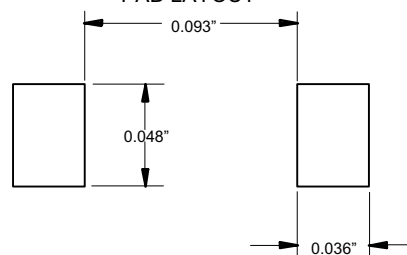


Figure 1

Typical Reverse Characteristics

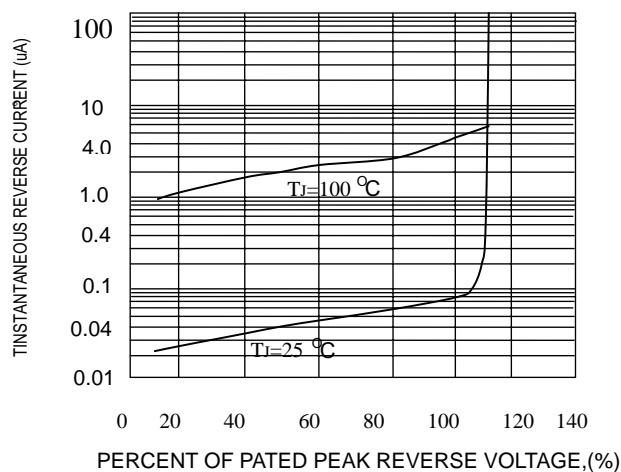


Figure 2

TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

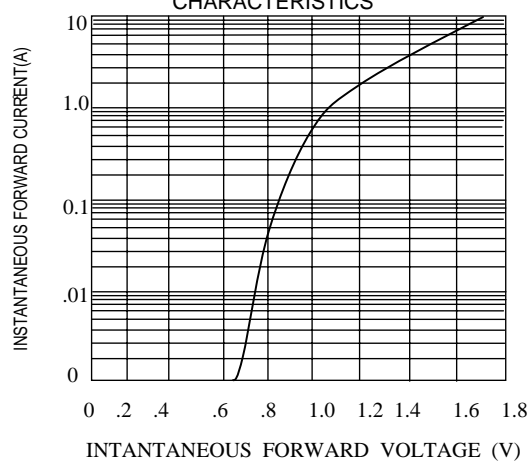


Figure 3

NON-REPETITIVE FORWARD SURGE CURRENT

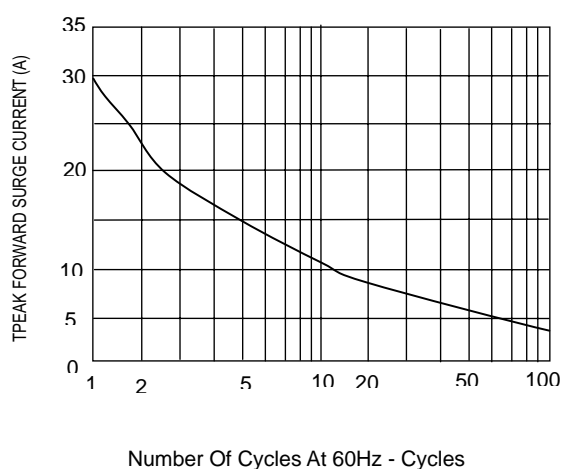
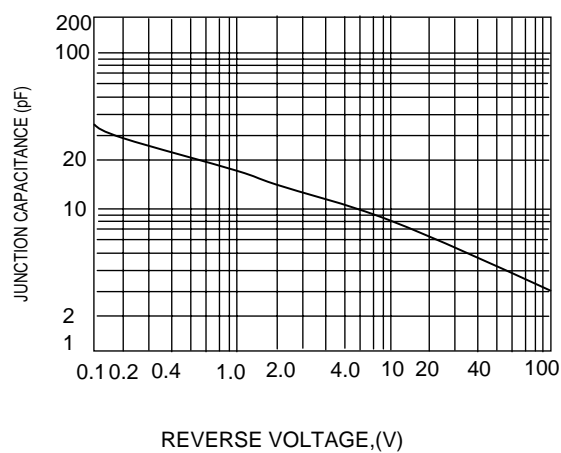


Figure 4

TYPICAL CAPACITANCE



## Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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