



Micro Commercial Components

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# FSM11PL THRU FSM16PL

## 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

## Maximum Ratings

- Operating Temperature(T<sub>J</sub>): -65°C to +150°C
- Storage Temperature(T<sub>STG</sub>): -65°C to +150°C
- Maximum Thermal Resistance(R<sub>thJA</sub>): 75°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

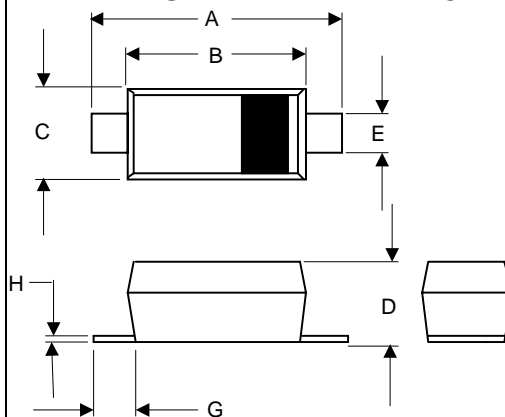
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	1.0 A	T <sub>L</sub> = 110°C
Peak Forward Surge Current	I <sub>FSM</sub>	30.0A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.3V	I <sub>FM</sub> = 1.0A; T <sub>A</sub> = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0µA 100µA	T <sub>A</sub> = 25°C T <sub>A</sub> = 55°C
Maximum Reverse Recovery Time	T <sub>rr</sub>	150ns 250ns 500ns	I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1.0A, I <sub>rr</sub> = 0.25A
Typical Junction Capacitance	C <sub>J</sub>	15pF	Measured at 1.0MHz, V <sub>R</sub> = 4.0V

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

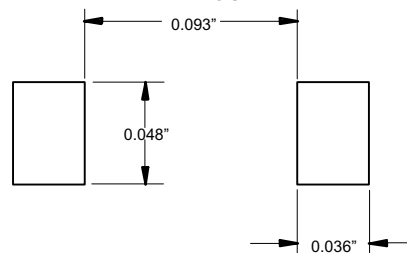
## 1.0 Amp Super Fast Recovery Rectifier 50 to 800 Volts

### POWERLITE-123



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-FSM16PL



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Figure 1  
Typical Reverse Characteristics

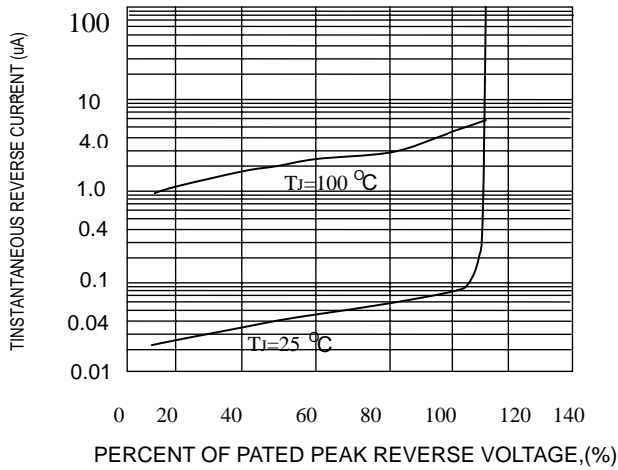


Figure 2  
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

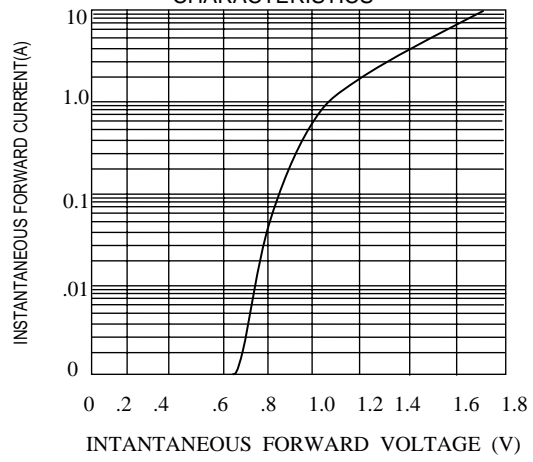


Figure 3  
NON-REPETITIVE FORWARD SURGE CURRENT

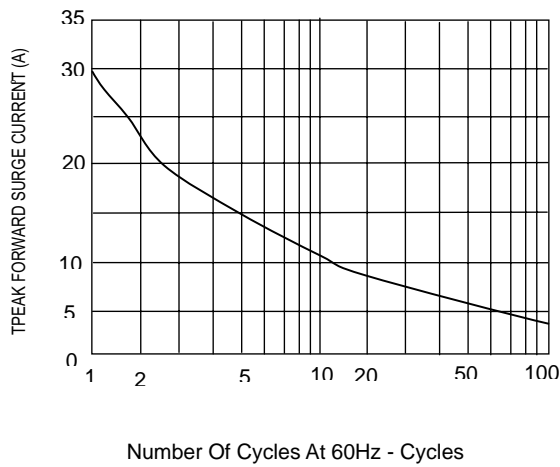
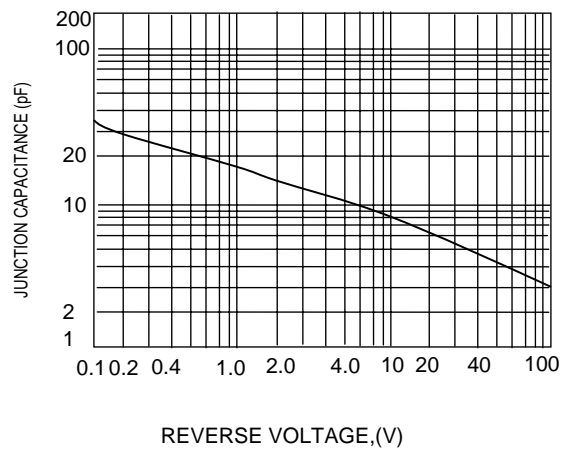


Figure 4  
TYPICAL CAPACITANCE





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