

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 (818) 701-4939

FSM11PL **THRU** FSM17PL

eatures

- 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)

Maximum Ratings

- Operating Temperature(Tj): -65°C to +150°C
- Storage Temperature(TsTG): -65°C to +150°C
- Maximum Thermal Resistance(RthJA): 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
FSM17PL	F7	1000V	700V	1000V

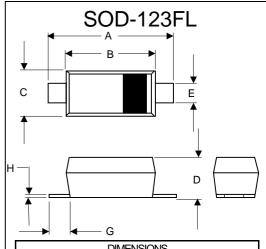
Electrical Characteristics @ 25 $^{\circ}$ Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	1.0 A	T _L = 110°C
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°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	5.0μA 100uA	T _A = 25°C T _A =55°C
Maximum Reverse Recovery Time FSM11PL-14PL FSM15PL FSM16PL-17PL	T _{rr}	150ns 250ns 500ns	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A
Typical Junction Capacitance	CJ	15pF	Measured at 1.0MHz, V _R =4.0V

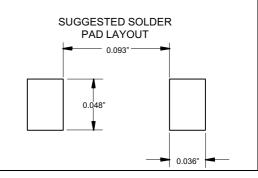
^{*6.0}mm² copper pads to each terminal

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

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



DIIVIENSIONS							
DIM	INCHES		MM		NOTE		
	MIN	MAX	MIN	MAX			
Α	.140	.152	3.55	3.85			
В	.100	.122	2.55	3.10			
С	.055	.075	1.40	1.90			
D	.035	.053	0.90	1.35			
Е	.020	.041	0.50	1.05			
G	.010		0.25				
Н		.010		.25			



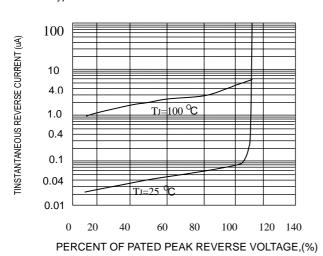
www.mccsemi.com

FSM11PL-FSM17PL



Figure 1

Typical Reverse Characteristics



TYPICAL INTANTANEOUS FORWARD CHARACTERISTICS

10

1.0

0.1

Figure 2

.2

Figure 4

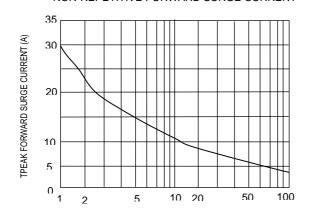
INTANTANEOUS FORWARD VOLTAGE (V)

1.0

1.2 1.4

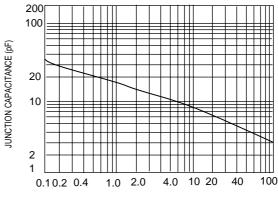
Figure 3

NON-REPETITIVE FORWARD SURGE CURRENT



TYPICAL CAPACITANCE

6



Number Of Cycles At 60Hz - Cycles



Micro Commercial Components

Ordering Information:

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

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.