# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

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**Micro Commercial Components** 



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311 Phone: (818) 701-4933 Fax: (818) 701-4939

#### Features

- Halogen free available upon request by adding suffix "-HF"
- Ultra fast Recovery
- High Reliability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note1)("P"Suffix designates Compliant. See ordering information)

### **Maximum Ratings**

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C
- Maximum Thermal Resistance; 180°C/W Junction To Ambient.

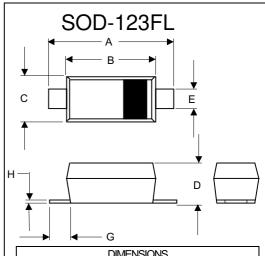
MCC		Maximum	Maximum	Maximum
Part	Device	Recurrent	RMS	DC
Number	Marking	Peak Reverse	Voltage	Blocking
	_	Voltage	_	Voltage
UFM11PL	U1	50V	35V	50V
UFM12PL	U2	100V	70V	100V
UFM13PL	U3	200V	140V	200V
UFM14PL	U4	400V	280V	400V
UFM15PL	U5	600V	420V	600V
UFM16PL	U6	800V	560V	800V
UFM17PL	U7	1000V	700V	1000V

#### Electrical Characteristics @ 25°C Unless Otherwise Specified

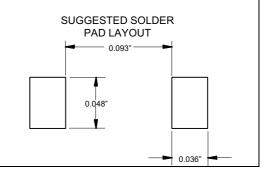
Average Forward Current	I <sub>F(AV)</sub>	1.0A	T <sub>L</sub> = 90°C
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage UFM11PL-13PL UFM14PL UFM15PL-17PL	V <sub>F</sub>	1.0V 1.40V 1.70V	I <sub>FM</sub> = 1.0A; T <sub>a</sub> = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10μΑ 50μΑ	Ta = 25°C Ta = 125°C
Maximum Reverse Recovery Time UFM11PL-13PL UFM14PL UFM15PL-16PL UFM17PL	Trr	35ns 50ns 75ns 100ns	I <sub>F</sub> = 0.5A,I <sub>R</sub> =1.0A, T <sub>rr</sub> = 0.25A
Typical Junction Capacitance	CJ	20pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

# UFM11PL THRU UFM17PL

### 1 Amp Ultra Fast Recovery Silicon Rectifier 50 to 1000 Volts



DIMENSIONS						
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		



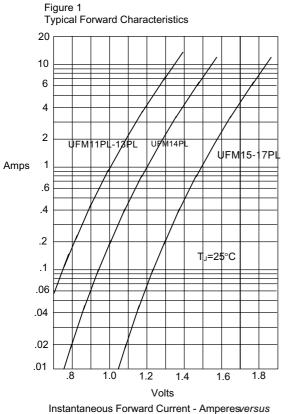
Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

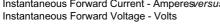
www.mccsemi.com

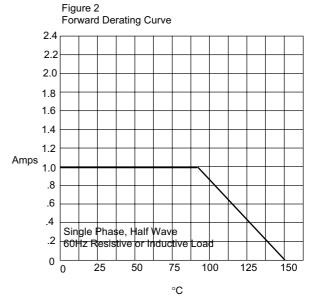
### **UFM11PL THRU UFM17PL**



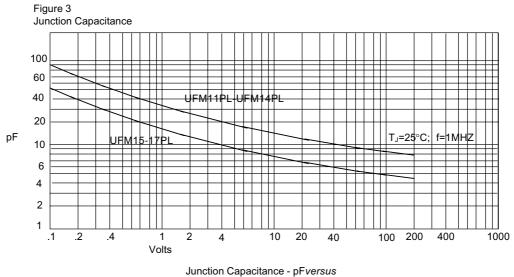
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Average Forward Rectified Current - Amperes/ersus Lead Temperature  $\ \ \ \circ^{\rm C}{\rm C}$ 

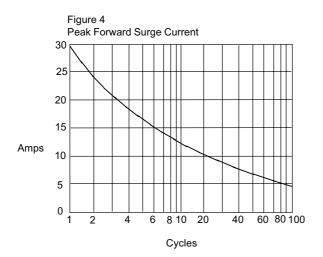


Reverse Voltage - Volts

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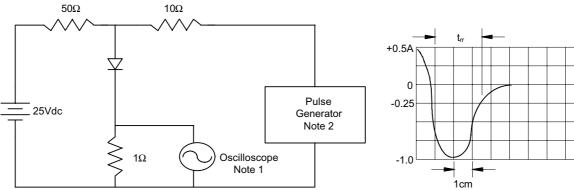


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Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Figure 5 Reverse Recovery Time Characteristic And Test Circuit Diagram



Notes:

1. Rise Time = 7ns max.

Input impedance = 1 megohm, 22pF

2. Rise Time = 10ns max.

Source impedance = 50 ohms

3. Resistors are non-inductive

Set Time Base for 20/100ns/cm

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#### **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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