

**Micro Commercial Components** 

ROHS

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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# UFM11PL THRU UFM17PL

### **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)

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

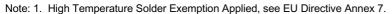
## **Maximum Ratings**

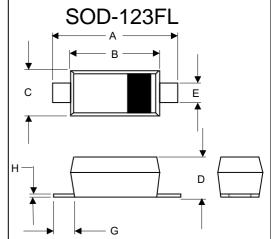
- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C
- Maximum Thermal Resistance; 180°C/W Junction To Ambient.

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

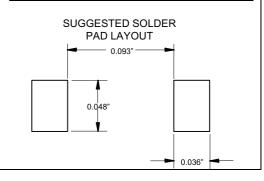
### Electrical Characteristics @ 25°C Unless Otherwise Specified

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	$V_{F}$	1.0V	$I_{FM} = 1.0A;$
UFM14PL		1.40V	T <sub>a</sub> = 25°C
UFM15PL-17PL		1.70V	
Maximum DC			
Reverse Current At	$I_R$	10μΑ	Ta = 25°C
Rated DC Blocking		50μΑ	Ta = 125°C
Voltage			
Maximum Reverse			
Recovery Time			
UFM11PL-13PL	$T_{rr}$	35ns	$I_F = 0.5A, I_R = 1.0A,$
UFM14PL		50ns	$I_{rr} = 0.25A$
UFM15PL-16PL		75ns	
UFM17PL		100ns	
Typical Junction	CJ	20pF	Measured at
Capacitance	)		1.0MHz, V <sub>R</sub> =4.0V





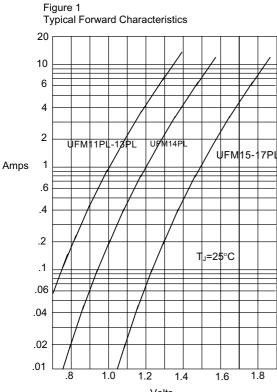
DIMENSIONS							
DIM	INCHES		MM		NOTE		
	MIN	MAX	MIN	MAX			
Α	.140	.152	3.55	3.85			
В	.100	.122	2.55	3.10			
С	.055	.075	1.40	1.90			
D	.035	.053	0.90	1.35			
Е	.020	.041	0.50	1.05			
G	.010		0.25				
Н		.010		.25			



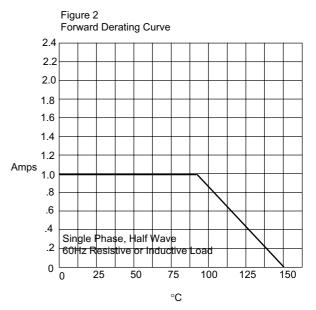
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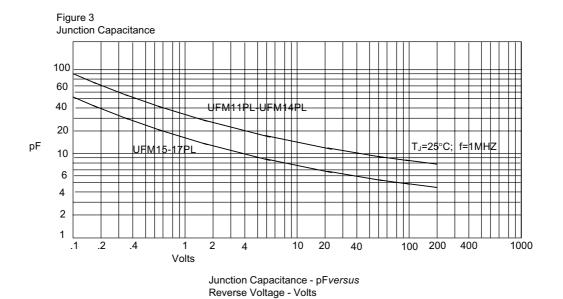
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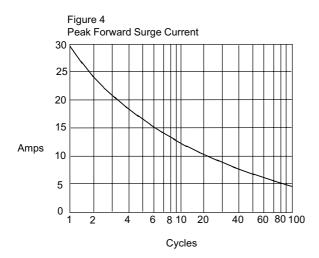
Volts
Instantaneous Forward Current - Amperes*versus*Instantaneous Forward Voltage - Volts



Average Forward Rectified Current - Amperes/ersus Lead Temperature -°C

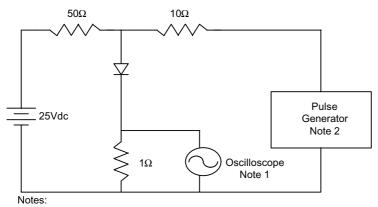


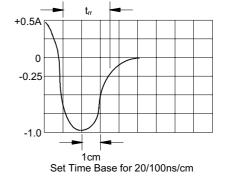




Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Figure 5
Reverse Recovery Time Characteristic And Test Circuit Diagram





1. Rise Time = 7ns max.

Input impedance = 1 megohm, 22pF

2. Rise Time = 10ns max.

Source impedance = 50 ohms

3. Resistors are non-inductive



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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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