UFM11PL THRU UFM17PL

1 Amp Ultra Fast Recovery

GM GarboMicro Semiconductor

Features

- Low Cost
- Ultra fast Recovery
- High Reliability
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

Recovery
Silicon Rectifier
50 to 1000 Volts

Maximum Ratings

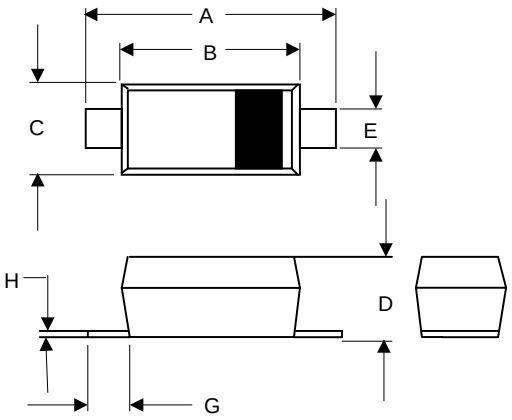
- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C
- Maximum Thermal Resistance; 180°C/W Junction To Ambient.

Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking 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

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	T_L = 90°C
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage UFM11PL-13PL UFM14PL UFM15PL-17PL	V_F	 1.0V 1.40V 1.70V	 I_{FM} = 1.0A; T_a = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10μA 50μA	Ta = 25°C Ta = 125°C
Maximum Reverse Recovery Time UFM11PL-13PL UFM14PL UFM15PL-16PL UFM17PL	T_{rr}	 35ns 50ns 75ns 100ns	 I_F = 0.5A,I_R=1.0A, T_{rr}= 0.25A
Typical Junction Capacitance	C_J	20pF	Measured at 1.0MHz, V_R=4.0V

SOD-123FL



DIM	DIMENSIONS INCHES MIN	INCHES MAX	MM MIN	MM MAX	NOTE
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

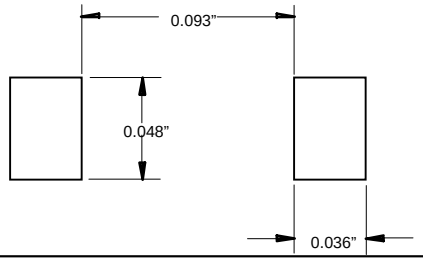


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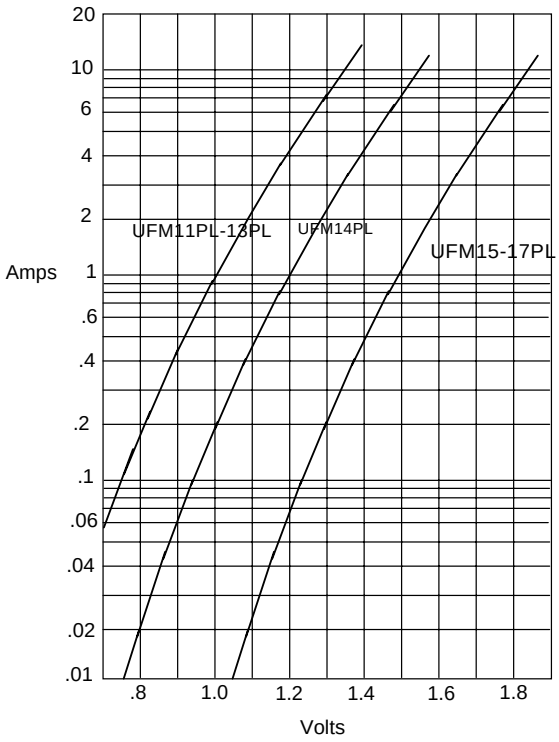
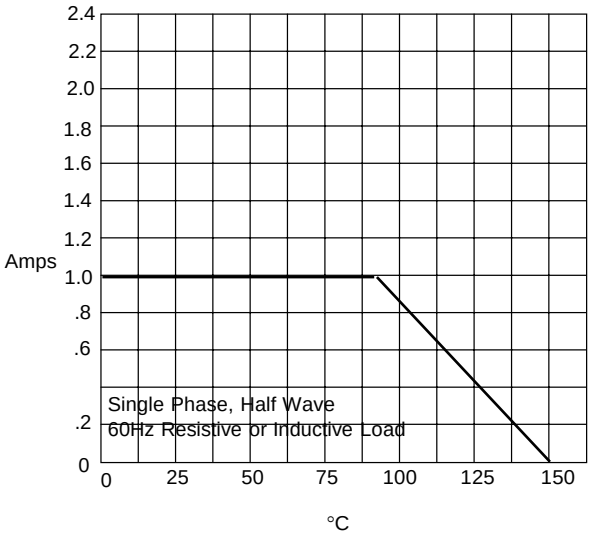
Figure 1
Typical Forward Characteristics



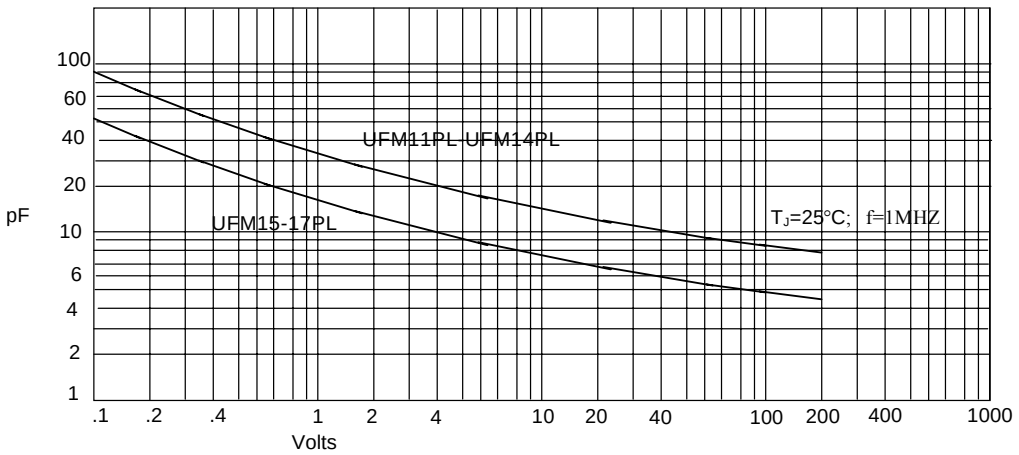
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



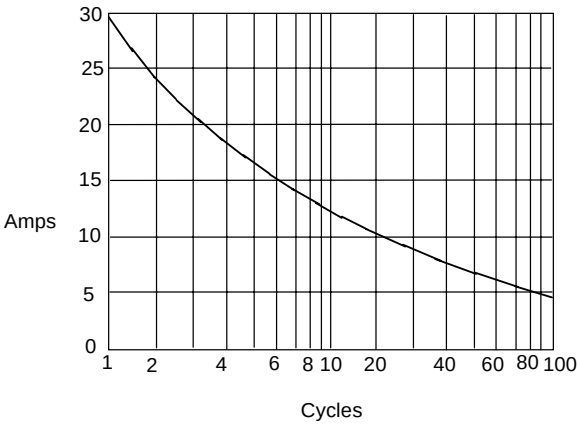
Average Forward Rectified Current - Amperes *versus*
Lead Temperature -°C

Figure 3
Junction Capacitance



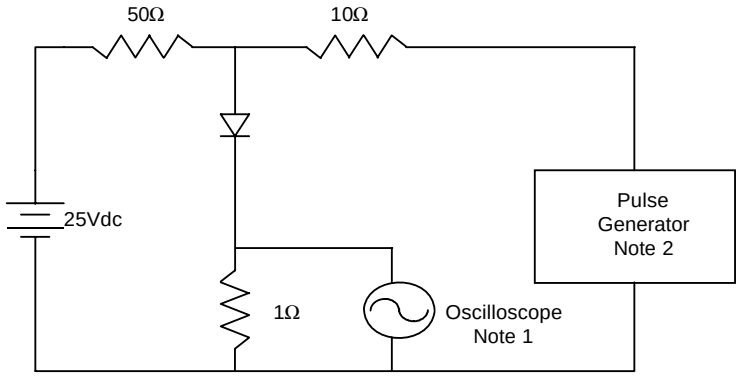
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

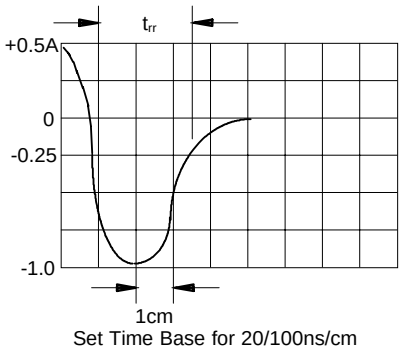
Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles

Figure 5
Reverse Recovery Time Characteristic And Test Circuit Diagram





Set Time Base for 20/100ns/cm

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