

1 Amp Ultra Fast Recovery

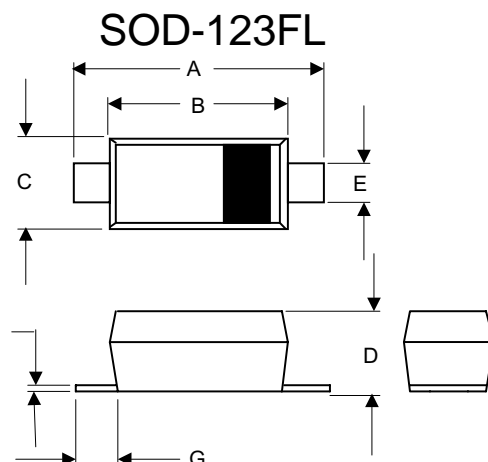
Features:

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

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
UF1AS	U1	50V	35V	50V
UF1BS	U2	100V	70V	100V
UF1DS	U3	200V	140V	200V
UF1GS	U4	400V	280V	400V
UF1JS	U5	600V	420V	600V
UF1KS	U6	800V	560V	800V
UF1MS	U7	1000V	700V	1000V



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	

Electrical Characteristics @ 25 ° C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_L = 90^\circ C$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.0V 1.40V 1.70V	$I_{FM} = 1.0A;$ $T_a = 25^\circ C$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 50 μA	$T_a = 25^\circ C$ $T_a = 125^\circ C$
Maximum Reverse Recovery Time	T_{rr}	35ns 50ns 75ns 75ns	$I_F = 0.5A, I_R = 1.0A,$ $T_{rr} = 0.25A$
Typical Junction Capacitance	C_J	20pF	Measured at 1.0MHz, $V_R = 4.0V$

SUGGESTED SOLDER PAD LAYOUT

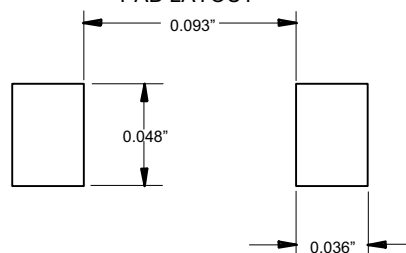
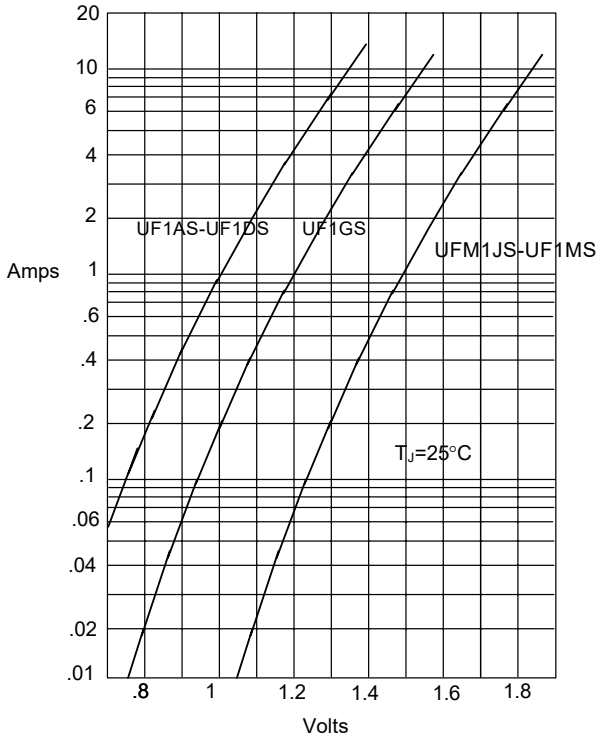
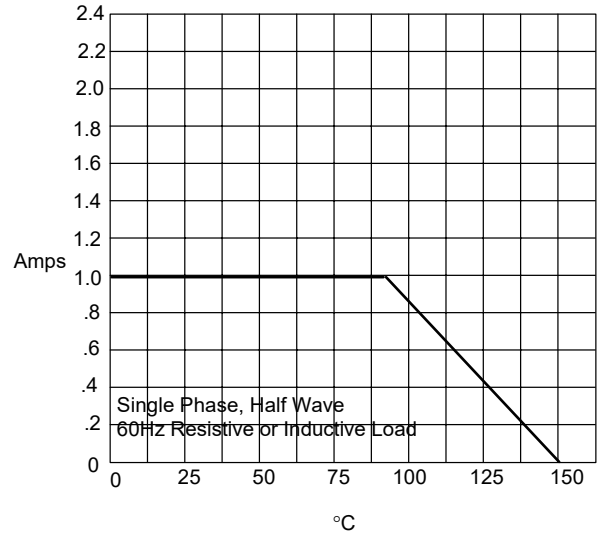


Figure 1
 Typical Forward Characteristics



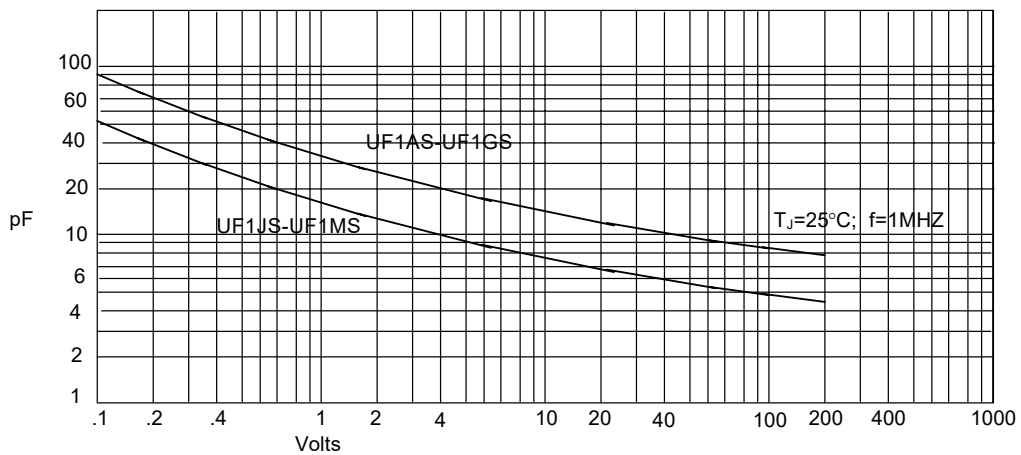
Instantaneous Forward Current - Amperes *versus*
 Instantaneous Forward Voltage - Volts

Figure 2
 Forward Derating Curve

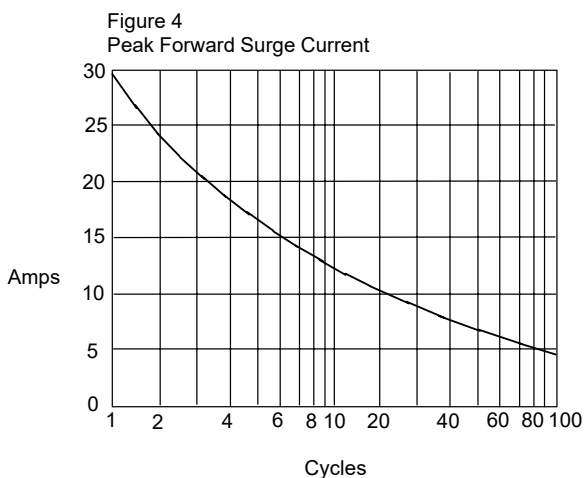


Average Forward Rectified Current - Amperes *versus*
 Lead Temperature - $^\circ\text{C}$

Figure 3
 Junction Capacitance

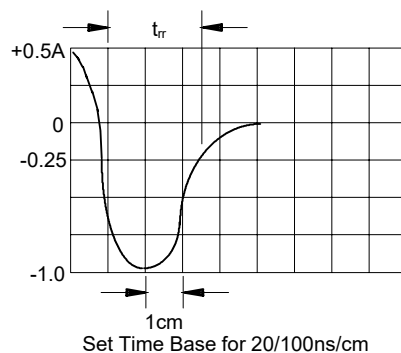
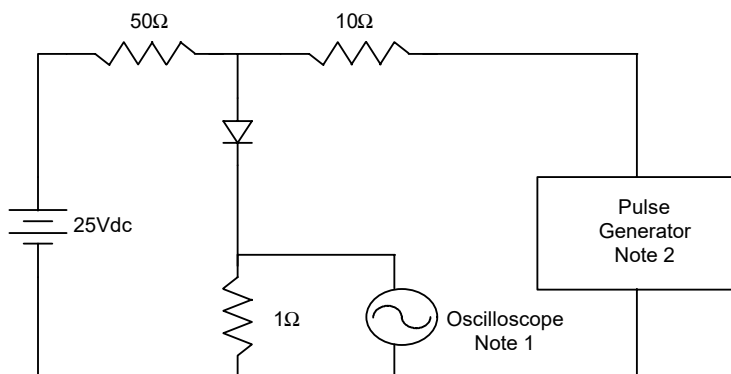


Junction Capacitance - pF *versus*
 Reverse Voltage - Volts



Peak Forward Surge Current - Amperes versus
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