SFM11PL THRU SFM18PL

SURFACE MOUNT SUPER FAST RECTIFIER

Reverse Voltage - 50 to 600 Volts Forward Current - 1.0 Ampere

FEATURES

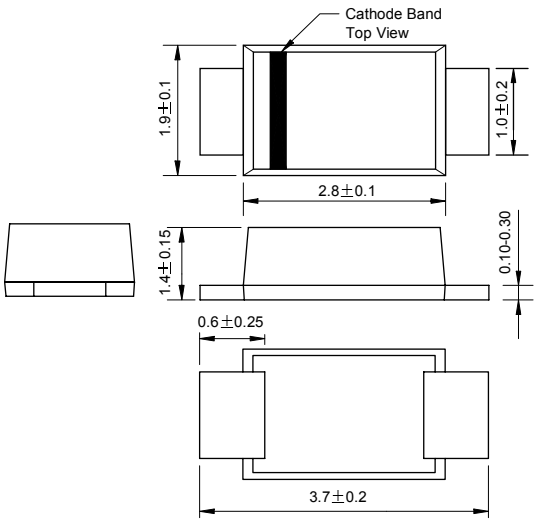
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250℃/10 seconds at terminals

MECHANICAL DATA

- Case: SOD-123FL, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.017 grams

RoHS Compliant

SOD-123FL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Characteristics	Symbol	SFM11 PL	SFM12 PL	SFM13 PL	SFM14 PL	SFM15 PL	SFM16 PL	SFM17 PL	SFM18 PL	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS Voltage	V_{RMS}	35	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	500	600	V
Maximum Average Forward Rectified Current @T_A=50°C	IF(AV)	1.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	25								A
Maximum Instantaneous At 1.0A DC	VF	0.95				1.25		1.70		V
Maximum DC Reverse Current @T_A=25°C At Rated DC Blocking Voltage @T_A=100°C	IR	5.0 100								uA
Reverse Recovery Time (Note1)	T_{RR}	35								nS
Operating Temperature Range	T_J	-55 to +150								°C
Storage Temperature Range	TSTG	-55 to +150								°C

Note: 1. Measured with IF = 0.5A, IR = 1.0A, IRR = 0.25A.

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RATINGS AND CHARACTERISTIC CURVES

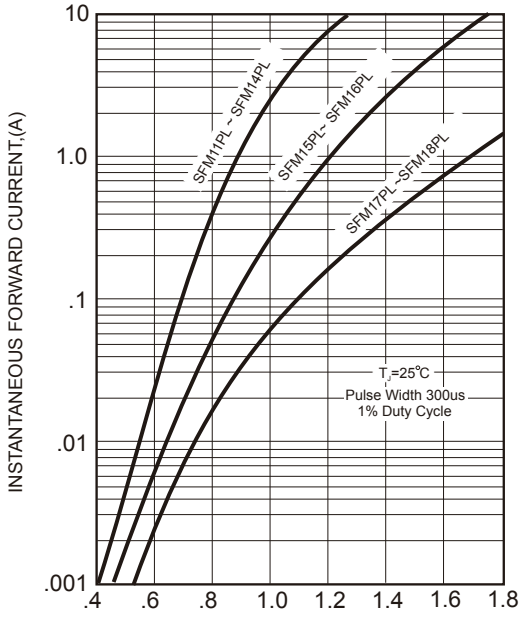


FIG.1-TYPICAL FORWARD CHARACTERISTICS

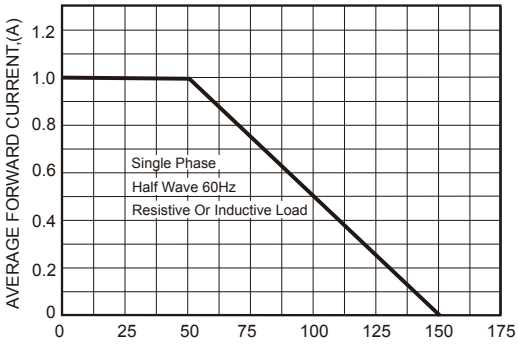
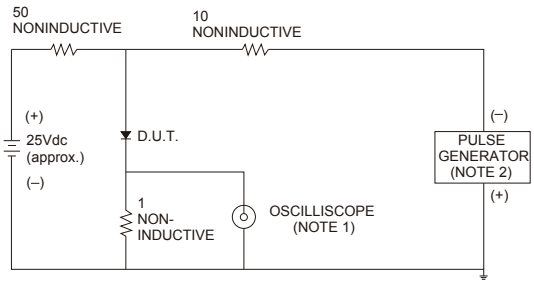


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS

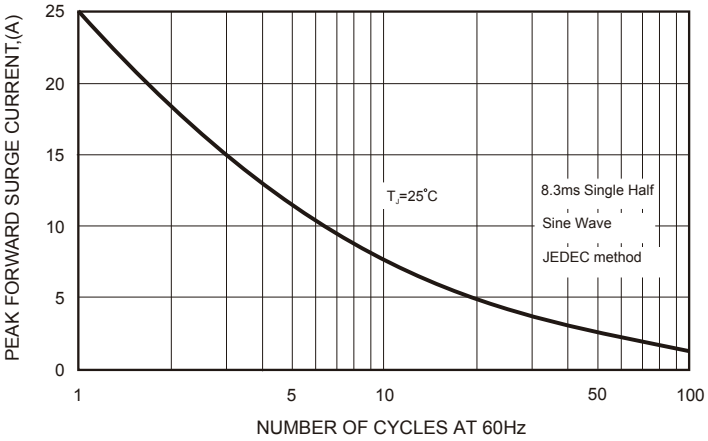
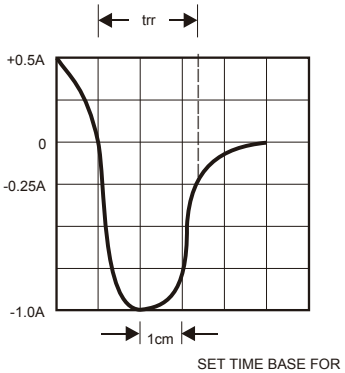


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



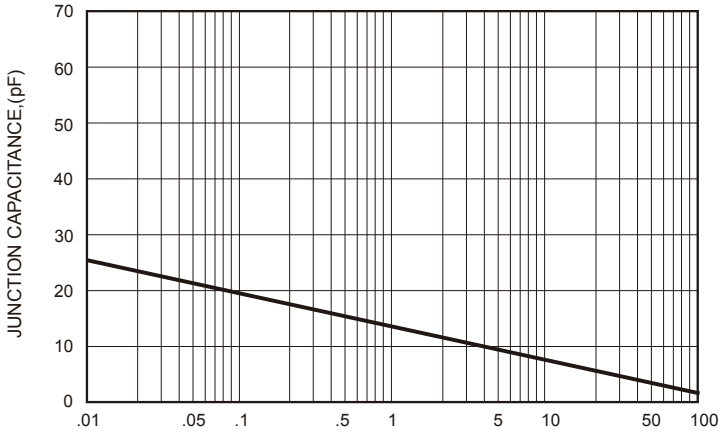


FIG.5-TYPICAL JUNCTION CAPACITANCE