

F1~F7

FAST RECOVERY PLASTIC RECTIFIER

VOLTAGE 50 to 1000 Volt **CURRENT** 1.0 Ampere

SOD-123FL

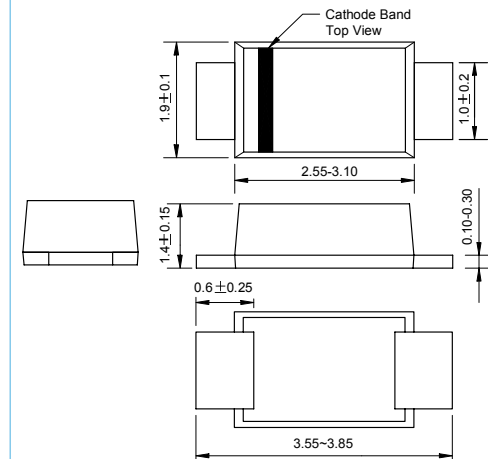
Unit:mm

FEATURES

- Fast Recovery Time For High Efficiency
- For Surface Mount Application
- High reliability
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	F1	F2	F3	F4	F5	F6	F7	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	7000	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current (see FIG.1)	I _{F(AV)}	1.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30							A
Maximum For ward Voltage at 1.0 A	V _F	1.30							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _J = 25 °C T _J = 100 °C I _R	5.0 100							μA
Maximum Reverse Recovery Time(Note 1)	t _{rr}	150				250	500		ns
Thermal Resistance	R _{θJA}	50							°C / W
Typical Junction Capacitance (Note2)	C _J	15							pF
Operating Junction Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

NOTES:

1. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.25A$
2. Measured at 1.0MHz and applied reverse voltage of 4.0 volt

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RATING AND CHARACTERISTIC CURVES

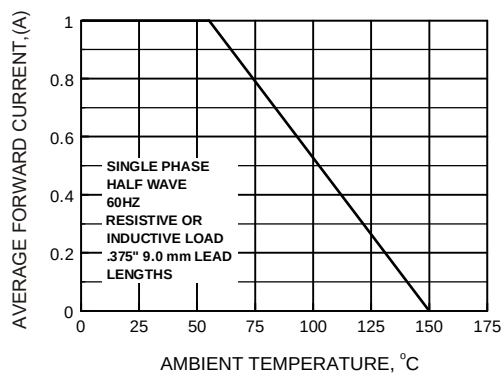


Fig. 1 Forward Current Derating Curve

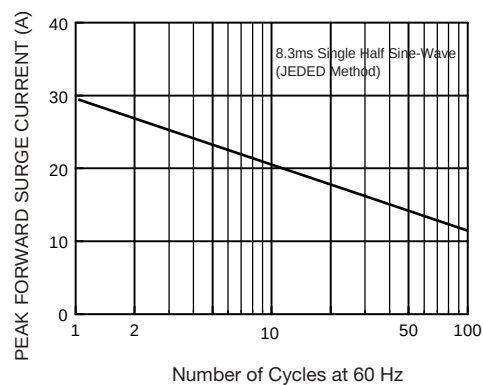


Fig. 2 Surge Current Derating Curve

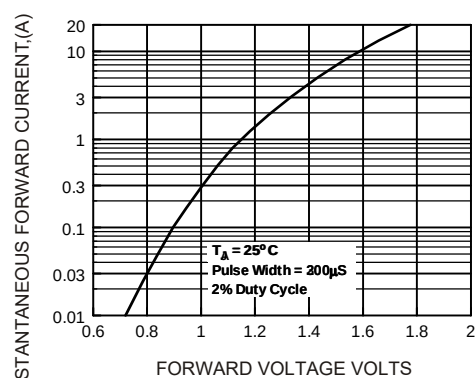


Fig. 3 Typical Forward Characteristics

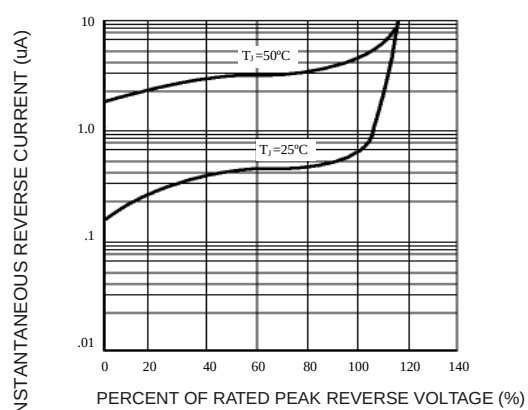


Fig. 4 Typical Reverse Characteristics

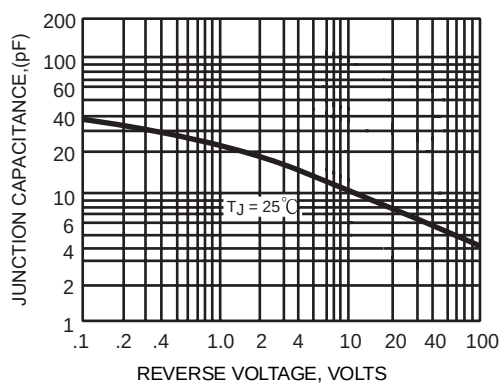


Fig. 5 Typical Junction Capacitance

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ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
F1~F7	SOD-123FL	7 Inch	2500