



SS12FL THRU SS120FL

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

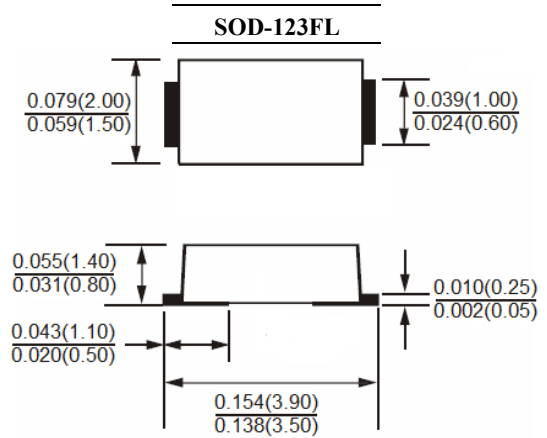
REVERSE VOLTAGE: 20 to 200 VOLTS
FORWARD CURRENT: 1.0 AMPERE

FEATURES

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- Suffix "H" indicates Halogen-free parts, ex. SS12FLH

MECHANICAL DATA

Case : Molded plastic, SOD-123FL
 Terminals: Solder plated, solderable per MIL-STD-750, method 2026 guaranteed
 Polarity : Color band denotes cathode end



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

Parameter	Symbols	SS12FL	SS13FL	SS14FL	SS16FL	SS18FL	SS110FL	SS115FL	SS120FL	Units
Maximum Recerrent Peak Reverse Voltage	V_{RRM}	20	30	40	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at T_L (See Fig. 1)	$I_{(AV)}$	1.0								Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25.0								Amp
Maximum Forward Voltage at 1.0A (Note 1)	V_F	0.55		0.75		0.85		0.95		Volts
Maximum Reverse Current at $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$	I_R	1.0 20								mAmp
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	88.0								°C/W
Operating Junction Temperature Range	T_J	-50 to +125								°C
Storage Temperature Range	T_{stg}	-50 to +125								

NOTES:

- 1- Pulse test: 300µs pulse width, 1% duty cycle
- 2- Mounted on FR-4 P.C.B. With 0.9x1.5 mm copper pad areas ($\approx 35 \mu m$ thick)



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RATINGS AND CHARACTERISTIC CURVES

Fig 1. Forward Current Derating Curve

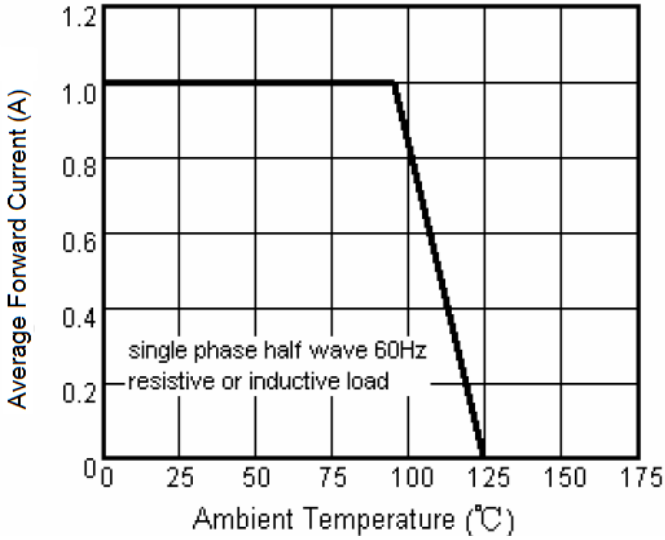


Fig 2. Maximum Non-Repetitive Peak Forward Surge Current

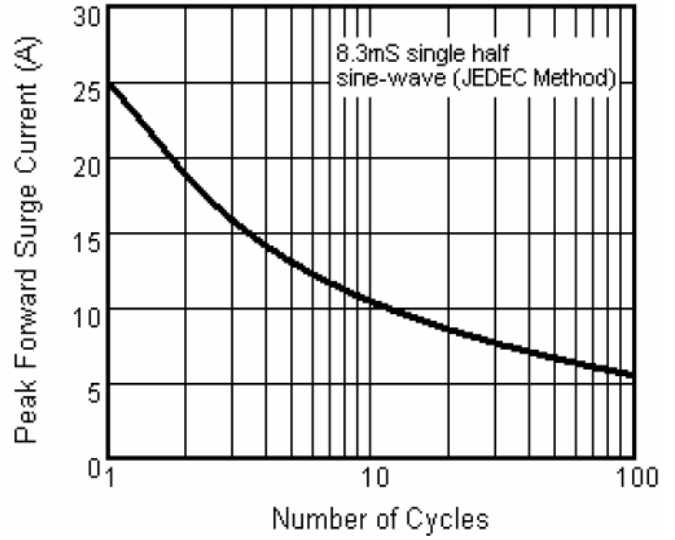


Fig. 3 Typical Instantaneous Forward Characteristics

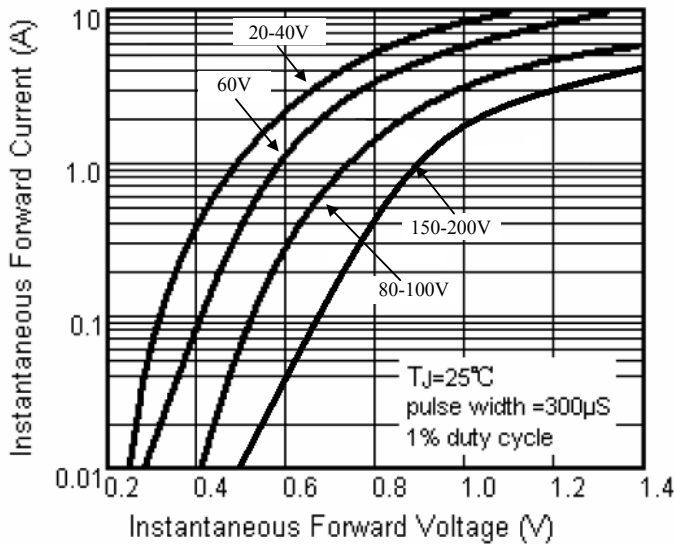


Fig. 4 Typical Reverse Characteristics

