



YENYO

# SS12FL THRU SS1DFL

## Surface Mount Schottky Barrier Rectifier

### Features

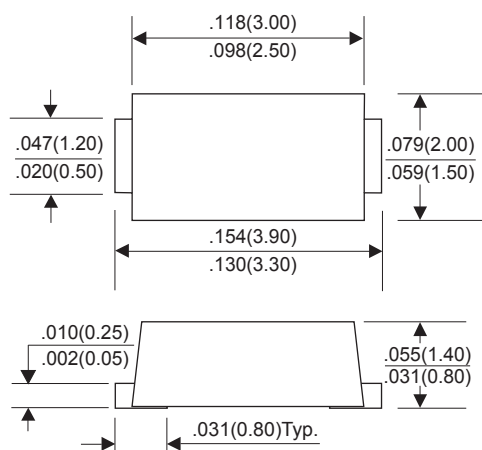
- ★ Low profile package
- ★ Ideal for automated placement
- ★ Guardring for overvoltage protection
- ★ Low power losses, high efficiency
- ★ Low forward voltage drop
- ★ High surge current capability

### Mechanical Data

- ★ Case: Molded plastic SOD-123FL
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-750 method 2026
- ★ Polarity: Color band denotes cathode end
- ★ Mounting position: Any

**Voltage Range 20 to 200V**  
**Current 1.0 Ampere**

### SOD-123FL



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	SYMBOL	SS12FL	SS13FL	SS14FL	SS15FL	SS16FL	SS18FL	SS1BFL	SS1CFL	SS1DFL	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	1.0									A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30									A
Maximum Instantaneous Forward Voltage @ I <sub>F</sub> =1.0A	V <sub>F</sub>	0.50			0.70		0.85		0.95		V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C At Rated DC Blocking Voltage @ T <sub>A</sub> =100°C	I <sub>R</sub>	0.2 6									mA
Typical Thermal Resistance To Ambient	R <sub>θJA</sub>	72									°C/W
Typical Thermal Resistance To Lead	R <sub>θJL</sub>	20									°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +125									°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150									°C

# RATINGS AND CHARACTERISTIC CURVES SS12FL THRU SS1DFL

FIG.1 - FORWARD CURRENT DERATING CURVE

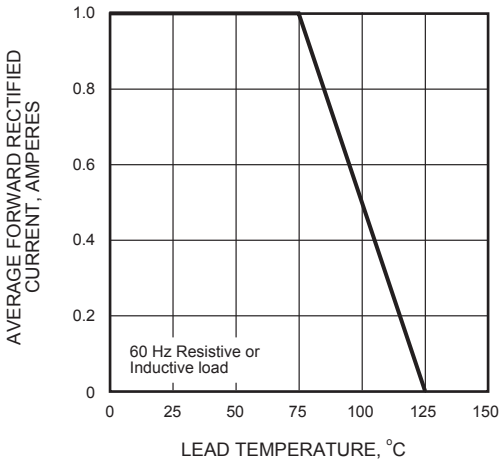


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

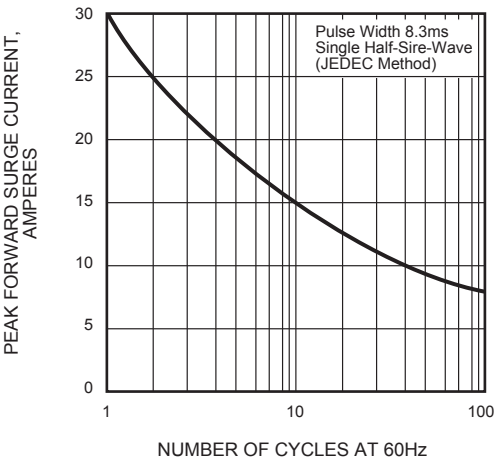


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

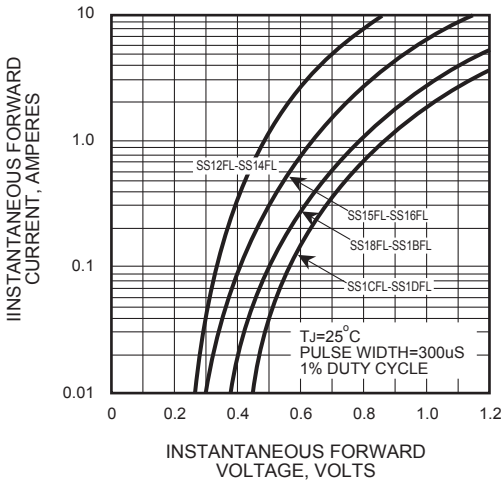


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

