

# SS12FL THRU SS120FL



康比電子  
HORNBY ELECTRONIC

## 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

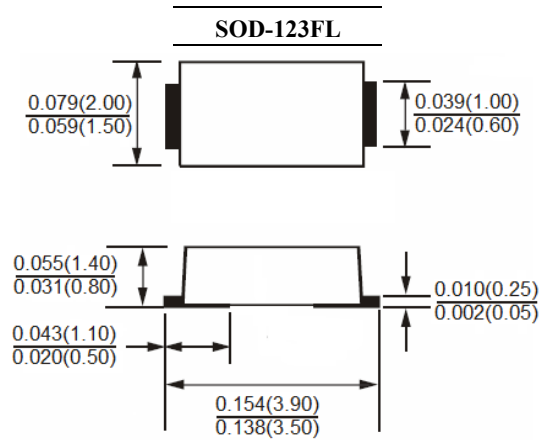
### MECHANICAL DATA

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 $T_A=25^\circ\text{C}$	$I_R$	1.0								mAmp
at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$		20								
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	88.0								$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_J$	-50 to +125								$^\circ\text{C}$
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 ( $\approx 35 \mu\text{m}$  thick)

# SS12FL THRU SS120FL

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



康比電子  
HORNBY ELECTRONIC

### RATINGS AND CHARACTERISTIC CURVES

Fig 1. Forward Current Derating Curve

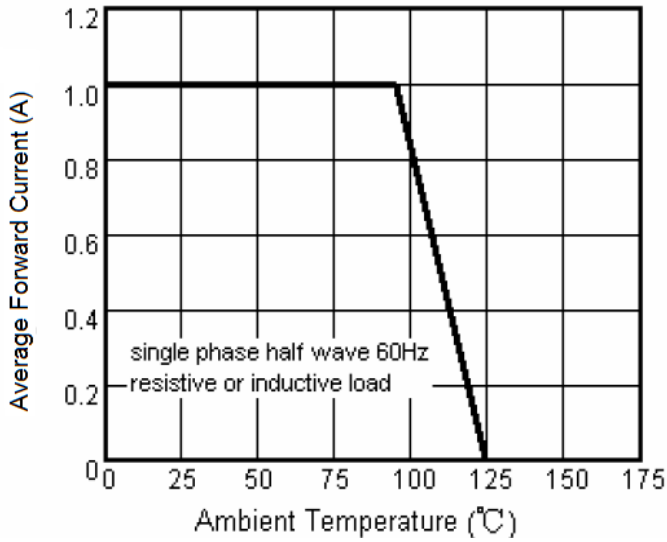


Fig 2. Maximum Non-Repetitive Peak Forward Surge Current

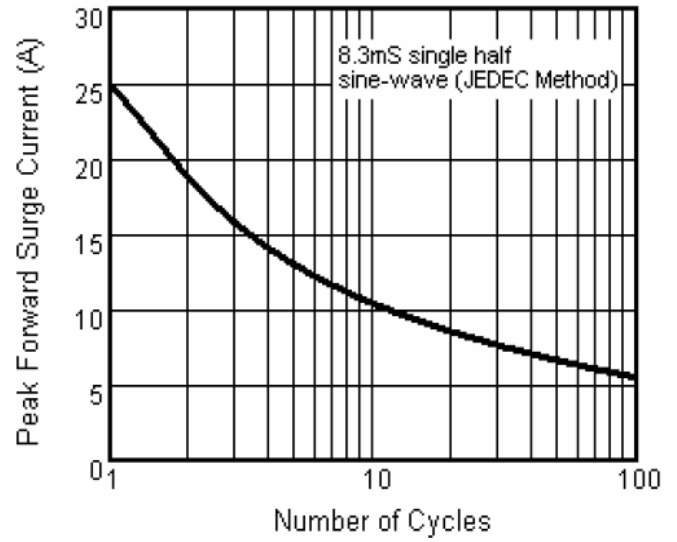


Fig. 3 Typical Instantaneous Forward Characteristics

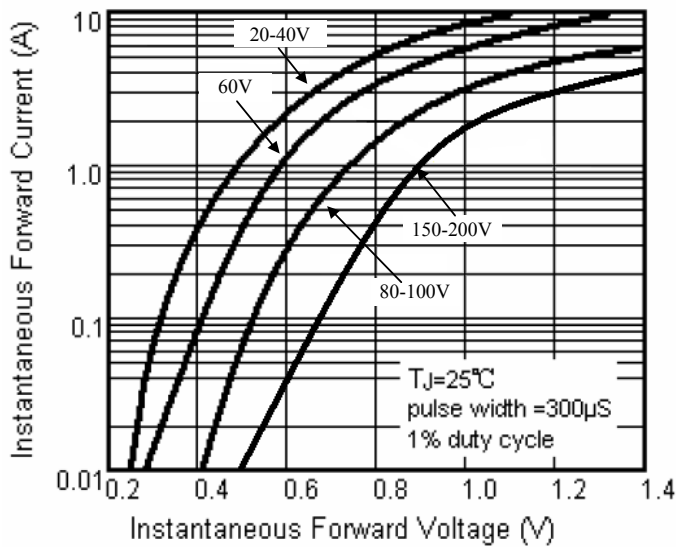


Fig. 4 Typical Reverse Characteristics

