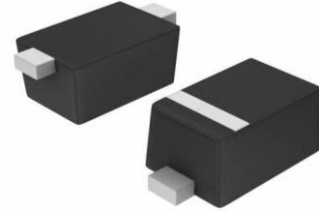


Surface Mount Schottky Barrier Rectifier

Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Classification 94V-O

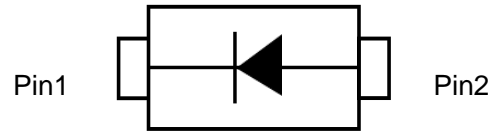
SOD-123FL Surface Mount



SOD-123FL

Mechanical Date

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



Circuit Diagram

Absolute Maximum Ratings (T_A = 25°C unless otherwise noted)

Characteristic	Symbol	SS12 D1F	SS14 D1F	SS16 D1F	SS18 D1F	SS110 D1F	UNIT
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	20	40	60	80	100	V
Forward Continuous Current	I _F	1.0					A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	25					A
Power Dissipation	P _d	450					mW
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +125					°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Characteristic	Symbol	SS12 D1F	SS14 D1F	SS16 D1F	SS18 D1F	SS110 D1F	UNIT
Forward Voltage Drop @IF = 1.0A	V _{FM}	0.45	0.55	0.55	0.70	0.85	V
Peak Reverse Leakage Current @ V _{RRM}	I _{RM}	500					µA
Typical Junction Capacitance	C _J	50					pF

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)

Fig 1. Forward Current Derating Curve

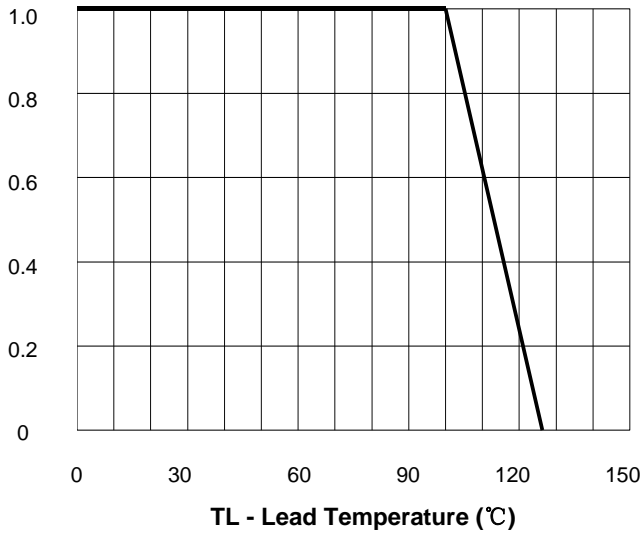


Fig 2. Maximum Non-Repetitive Peak Forward Surge Current

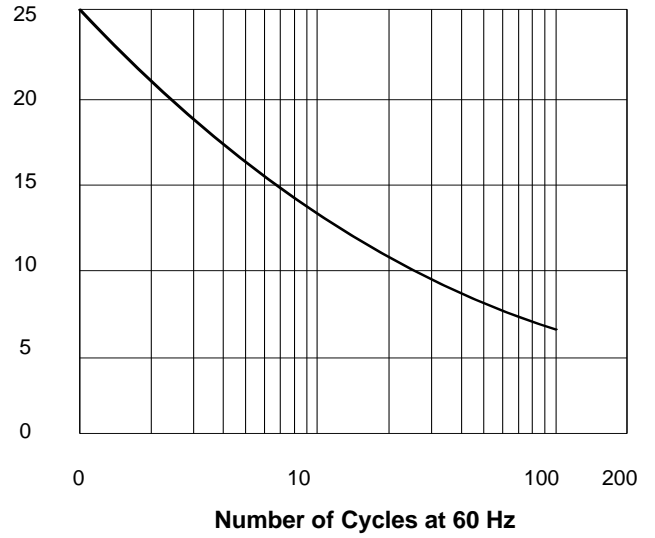


Fig 3. Typical Instantaneous Forward

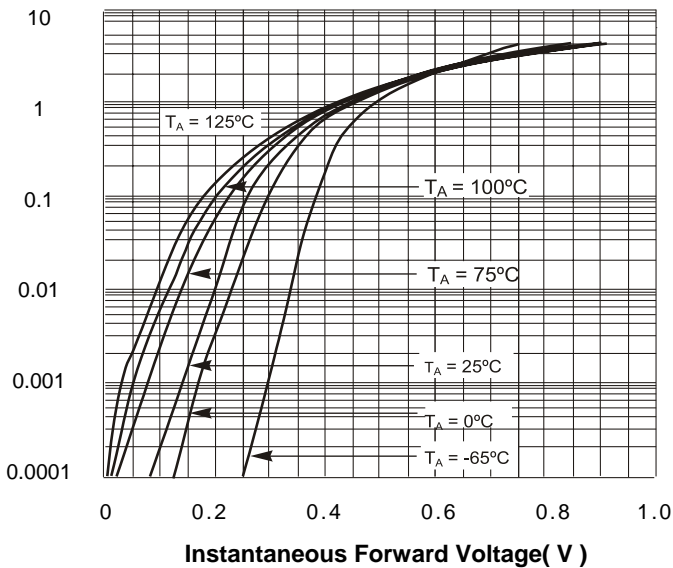
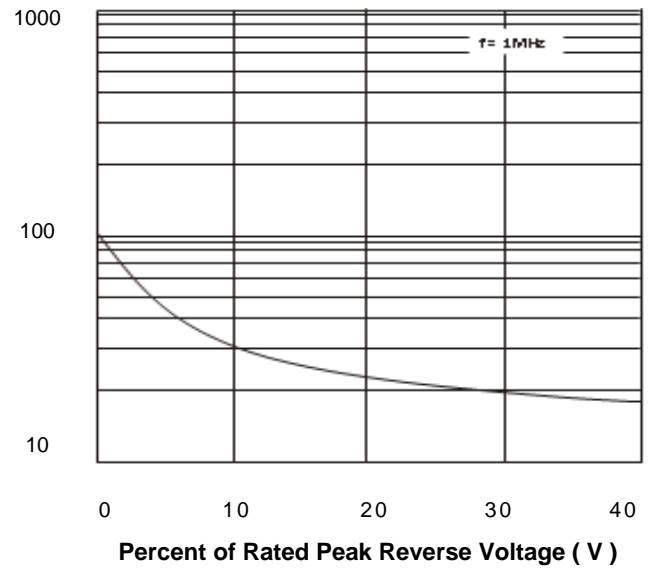
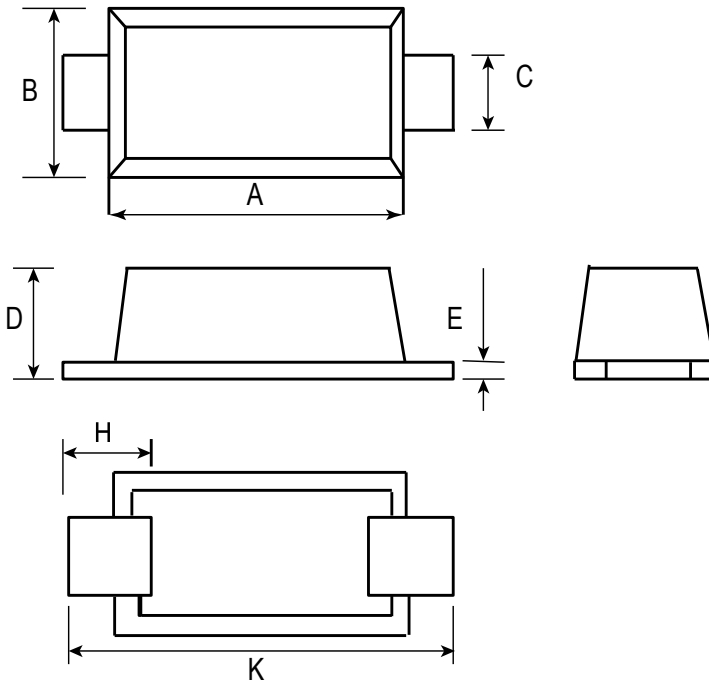


Fig 4. Typical Reverse Leakage Characteristics

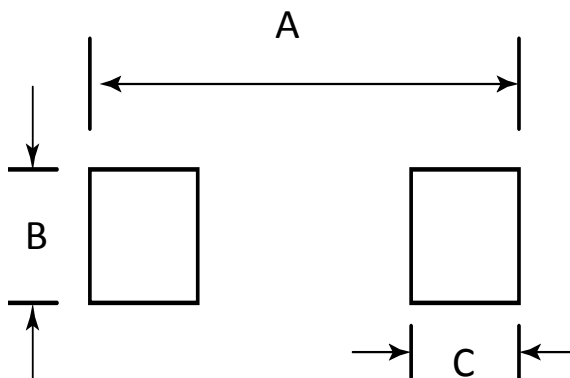


SOD-123FL Package Outline Drawing



DIM	Millimeters		
	Min	Nom	Max
A	2.70	2.80	2.90
B	1.80	1.90	2.00
C	0.80	1.00	1.20
D			1.40
E	0.10	0.20	0.30
H	0.35		0.85
K	3.50		3.90

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
A	4.19	0.165
B	1.20	0.048
C	0.90	0.036