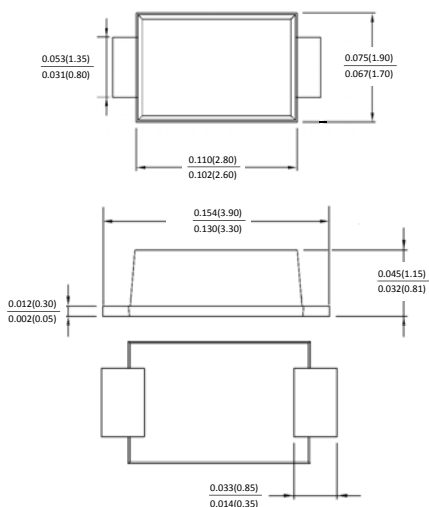




SS12SL thru SS16SL

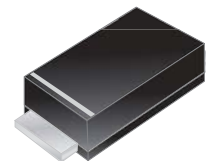


Schottky Barrier Rectifiers



SOD-123F

Dimensions in inches and (millimeters)



Ordering Information	
Part Number	Remark
SSXSL	General
SSXSL-H	Halogen Free
SSXSL-Q	Automotive

PRIMARY CHARACTERISTICS	
I_F	1A
V_{RRM}	20~60V
I_{FSM}	30A
V_F	0.37, 0.46, 0.55V
T_J max	75°C

Features

- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering : 250°C for 10 Seconds at Terminals
- Low Forward Voltage
- RoHS Compliant Product
- AEC-Q101 qualified

Mechanical Data

- Case: SOD-123F
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.015 grams (approximate)

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	SS12SL	SS13SL	SS14SL	SS16SL	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	60	V
Working Peak Reverse Voltage	V_{RMS}	14	21	28	42	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	60	V
Average Forward Current @T _J =25°C	I_F	1.0				A
Peak Forward Current @ 8.3 ms Half Sine	I_{FSM}	30.0				A
Maximum Instantaneous Forward Voltage T _J =25°C	V_F	0.37	0.46		0.55	V
Maximum DC Reverse Current T _J =25°C	I_R	1.0				mA
Typical Junction Capacitance(Note 1)	C_j	90				pF
Typical Thermal Resistance (Note 2)	$R_{\theta Ja}$	100				°C/W
MARKING CODE		K2	K3	K4	K6	
Operating Temperature Range	T_J	-50 ~ 75				°C
Storage Temperature Range	T_{STG}	-50 ~ 125				°C

NOTES:

1. Measured at 1MHZ and applied reverse of 4V DC.
2. Device mounted on FR-4 substrate, 1"*1", 2oz, single-sided, PC boards with 0.1"*0.15" copper pad.

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

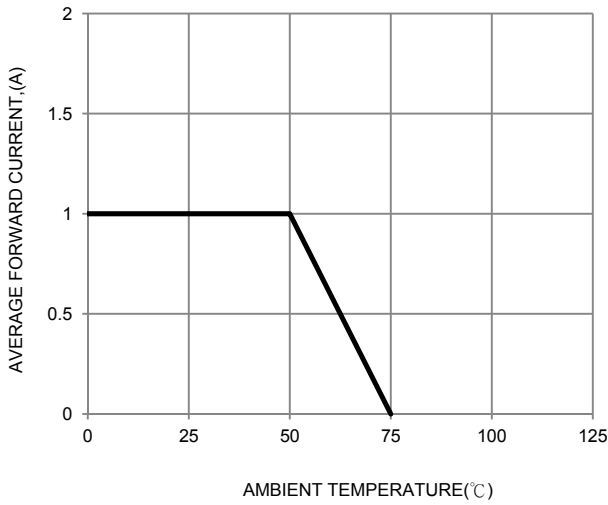


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

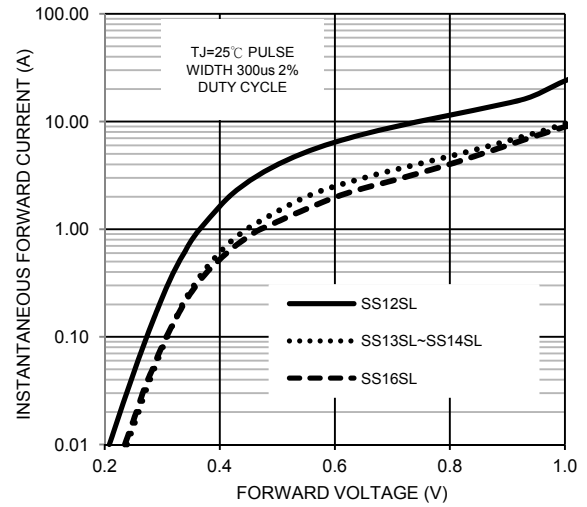


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

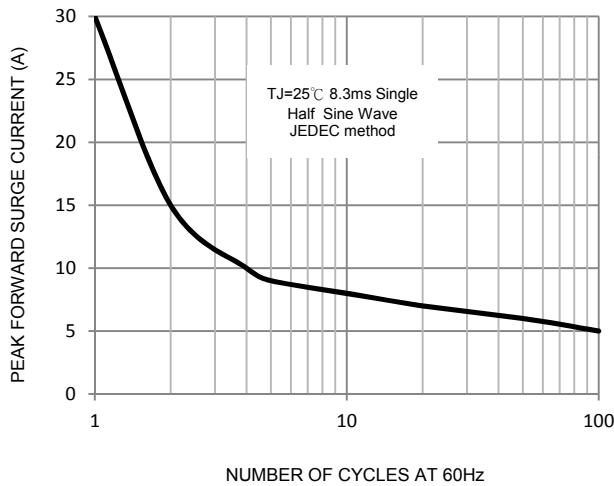


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

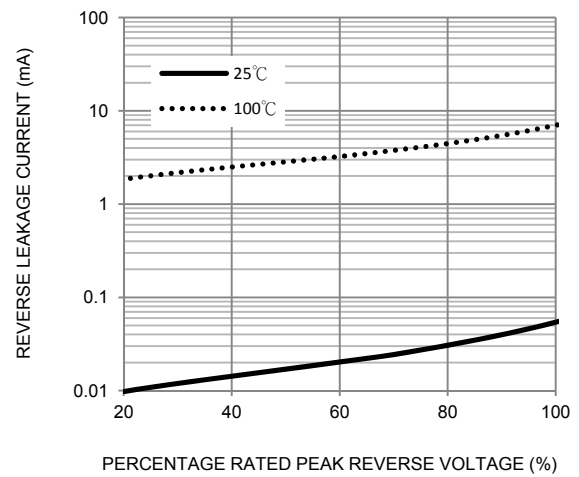


FIG. 5-TYPICAL JUNCTION CAPACITANCE

