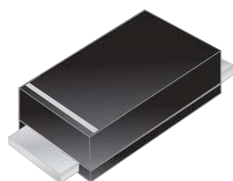




SS12L thru SS120L



Schottky Barrier Rectifiers



SOD-123F

Primary Characteristics		
I_F	1	A
V_{RRM}	20~200	V
I_{FSM}	30	A
V_F	0.52、0.66、0.83、0.87、0.90	V
$T_J \text{ max}$	125、150	°C

Features
<ul style="list-style-type: none"> • High Current Capability • Extremely Low Thermal Resistance • For Surface Mount Application • Low Forward Voltage • RoHS Compliant Product

Mechanical Data
• Cases: 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: 0.022 grams (approximate)

Ordering Information			
Part No.	Remark	Package	Packing
SS1XXL	General	SOD-123F	3000 / Tape & Reel
SS1XXL-H	Halogen Free		
SS1XXL-Q	AEC-Q101 qualified		

Maximum Ratings (TA=25°C unless otherwise noted)											
PARAMETER	SYMBOL	SS 12L	SS 13L	SS 14L	SS 16L	SS 18L	SS 110L	SS 115L	SS 120L	UNIT	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	60	80	100	150	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	42	56	70	105	140	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	60	80	100	150	200	V	
Maximum average forward rectified current	I_F	1.0								A	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0								A	
Maximum Instantaneous Forward Voltage IF=1A @ 25°C	V_F	0.52		0.66		0.83		0.87	0.90	V	
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C	I_R	0.5 20						0.2 10		mA	
Typical Junction Capacitance(NOTE1)	C_j	60				25				pF	
Typical Thermal Resistance	$R_{\theta JC}$	45									°C/W
Operating Temperature Range	T_J	-50 ~ 125					-50 ~ 150				°C
Storage Temperature Range	T_{STG}	-55 ~ 150									°C
Marking Code		C2	C3	C4	C6	C8	CA	CB	CC		

NOTES:

1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

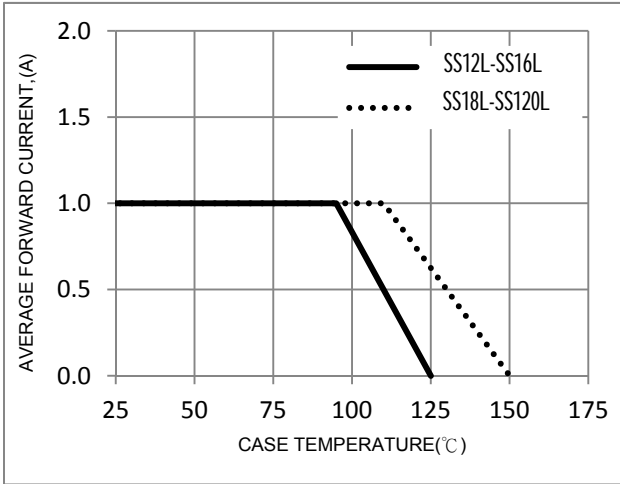


FIG. 2-Typical Forward Characteristics

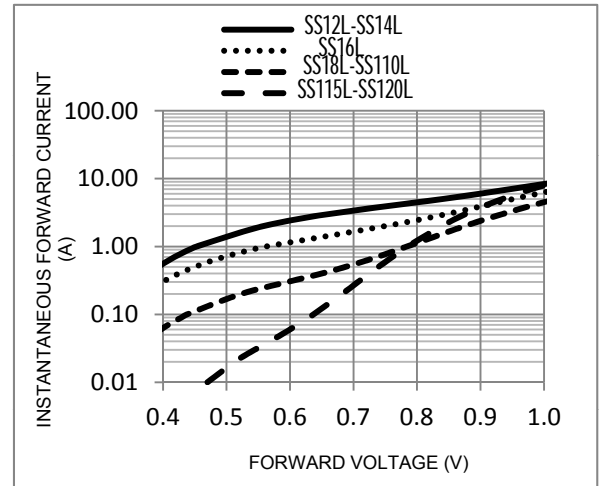


FIG. 3-Maximum Non-Repetitive Forward Surge Current

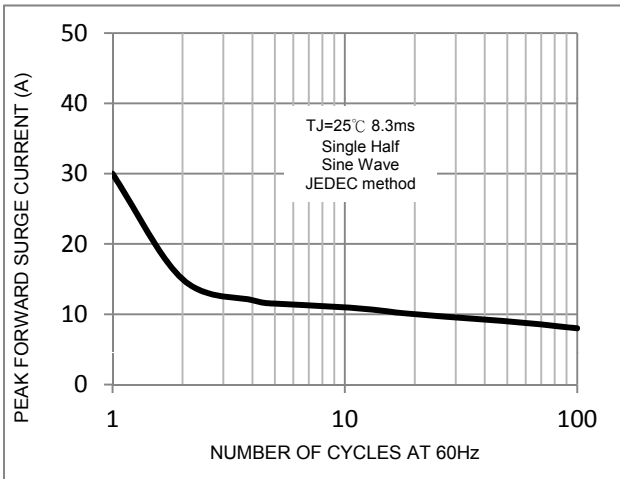


FIG. 4-Typical Reverse Characteristics

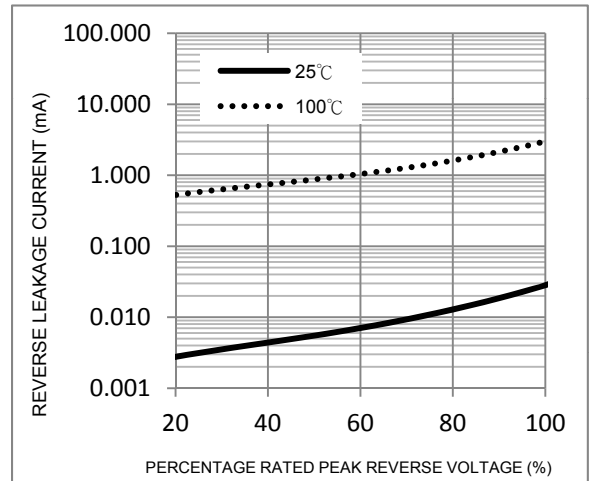
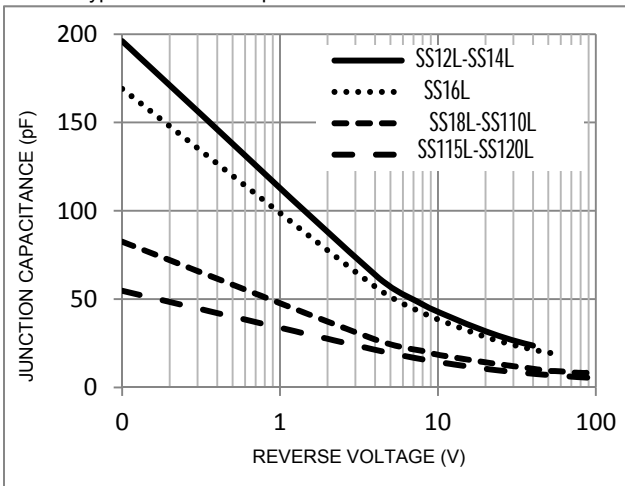
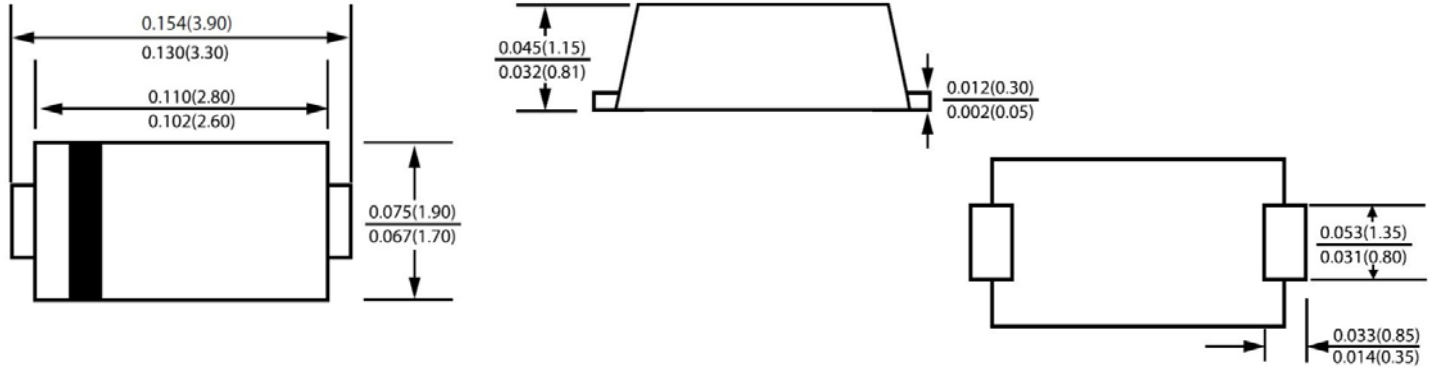


FIG. 5-Typical Junction Capacitance



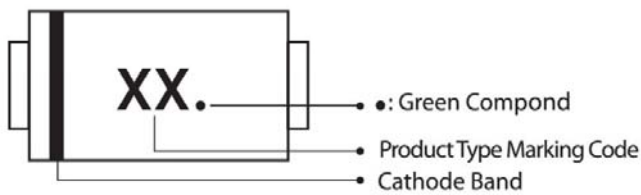
Package Outline Dimensions



SOD-123F

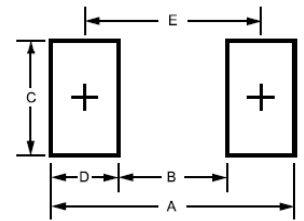
Dimensions in inches and (millimeters)

Marking Information



Suggested Pad Layout

Dimension	Outline	SOD-123F (mm)
A		4.20
B		1.52
C		1.80
D		1.34
E		2.86



Tap & Reel Specification

ITEM	SYMBOL	SOD-123F (mm)
Carrier width	A	3±0.1
Carrier length	B	5.6±0.1
Carrier depth	C	1.2±0.1
Sprocket hole	d	1.50±0.1
Reel outside diameter	D	330±2.0
Reel inner diameter	D1	13.5±1
Feed Hole diameter	D2	50 (min.)
Sprocket hole position	E	1.75±0.1
Punch hole position	F	5.5±0.05
Punch hole pitch	P	4.0±0.1
Sprocket hole pitch	P0	4.0±0.05
Embossment center	P1	2.0±0.05
Overall tape thickness	T	0.25±0.05
Tape width	W	12.0±0.2
Reel width	W1	18.4 (max)

