

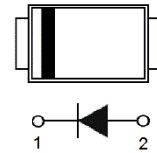
Schottky Barrier Rectifier 1A, 20~200V SOD-123FL

SL1 Series

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FEATURES

- Low Power loss, High Efficiency
- Low Profile Package
- High Surge Capacity, Low Forward Voltage Drop
- Applications: High-Frequency Inverters, Polarity Protection, Free Wheeling



MECHANICAL DATA

- Case: SOD-123FL Package, Molded EPOXY Meets UL94V-0
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026 guaranteed
- Polarity: Color Band denotes Cathode end

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter		Symbol	SL 12	SL 13	SL 14	SL 15	SL 16	SL 18	SL 110	SL 115	SL 120	Unit
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage		V _{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage		V _{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current at T _L		I _(AV)	1.0									A
Forward Surge Current, 8.3ms single half-sine-wave Superimposed on Rated Load (JEDEC method)		I _{FSM}	25.0									A
Maximum Forward Voltage at IF=1.0A		V _F	0.45			0.55		0.75		0.85		V
Maximum Reverse Current	V _R =V _{RRM} , T _A =25°C	I _R	1.0									mA
	V _R =V _{RRM} , T _A =100°C		20									
Typical Thermal Resistance		R _{θJA}	92									°C/W
Diode Junction Capacitor	F=1MHz, V _R =4VDC	C _J	110									pF
Operating Junction Temperature Range		T _J	-55 to +125					-55 to +150				°C
Storage Temperature Range		T _{STG}	-65 to +150									°C

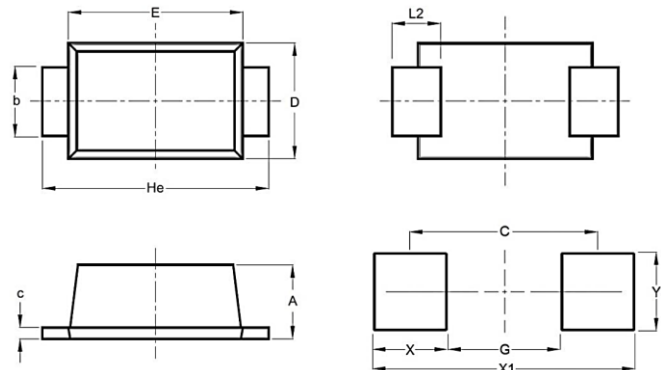
Note:

1. Ratings at 25°C ambient temperature unless otherwise specified.

2. Thermal resistance from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 x 5.0 mm) copper pad areas

DIMENSIONS

Item	Min (mm)	Max (mm)
A	0.85	1.35
b	0.80	1.20
c	0.10	0.30
D	1.60	2.00
E	2.50	2.90
He	3.50	3.90
L2	0.35	0.85
C	3.30	
G	1.90	
X	1.40	
X1	4.70	
Y	1.90	



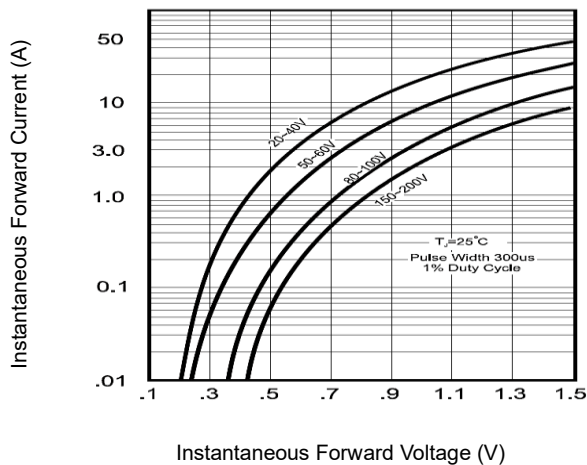
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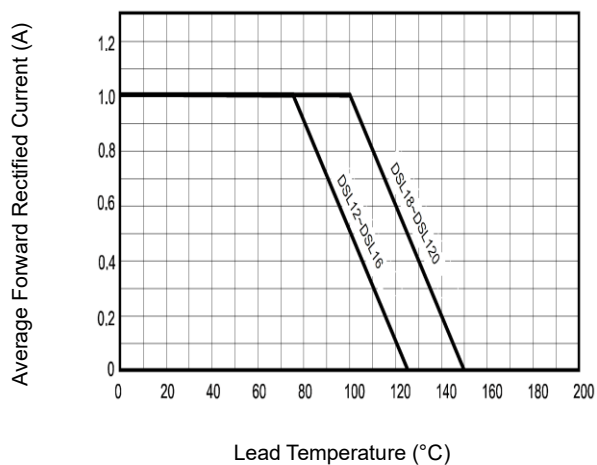
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CHARACTERISTIC CURVES

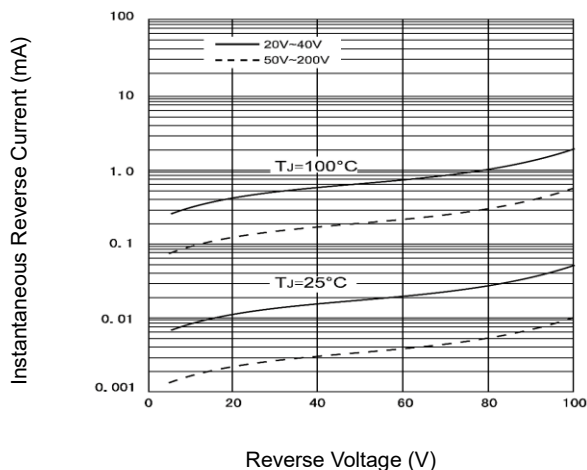
Typical Instantaneous Forward Characteristics



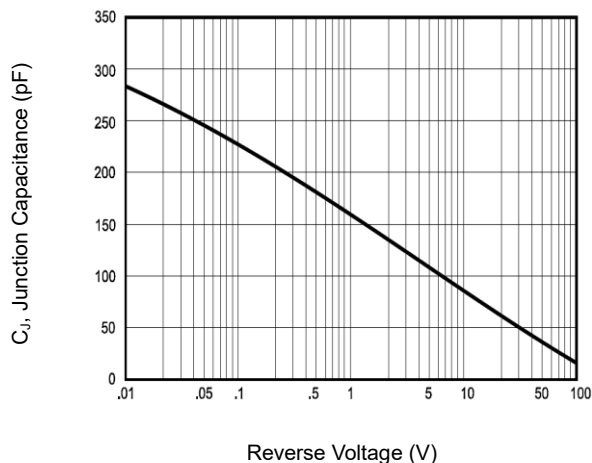
Typical Forward Current Derating Curve



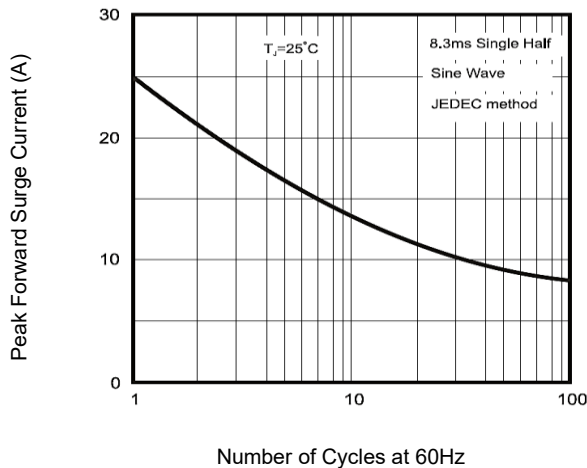
Typical Reverse Characteristics



Typical Junction Capacitance



Maximum Non-Repetitive Forward Surge Current



*Specifications subject to change without notice