

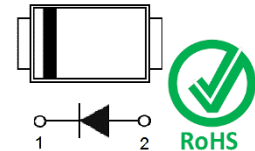
FEATURES

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



MECHANICAL DATA

- Case: SOD-123FL, Molded Plastic 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

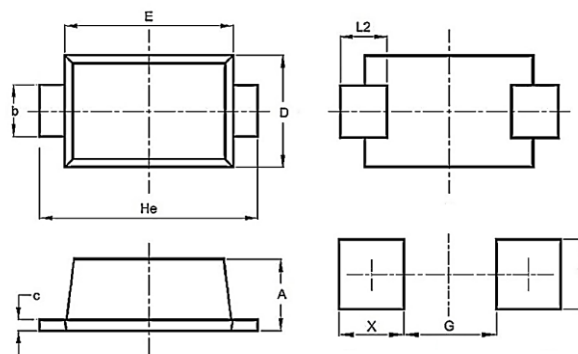
Parameter	Symbol	SL12 FL	SL13 FL	SL14 FL	SL15 FL	SL16 FL	SL18 FL	SL110 FL	SL115 FL	SL120 FL	Unit	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V	
Maximum Forward Rectified Current (See Fig. Typical Forward Current Derating Curve)	I_O	1.0									A	
Peak Forward Surge Current, 8.3ms single half-sine-wave (JEDEC method)	I_{FSM}	25.0									A	
Maximum Forward Voltage at 1.0A	V_F	0.45			0.55		0.75		0.85		V	
Maximum Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	1.0									mA	
	$T_A=100^\circ\text{C}$	20										
Typical Diode Junction Capacitance	C_J	110									pF	
Typical Thermal Resistance	$R_{\theta JL}$	92									$^\circ\text{C/W}$	
Operating Temperature Range	T_J	-55 to +125					-55 to +150					$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150									$^\circ\text{C}$	

Note:

1. Ratings at 25°C ambient temperature unless otherwise specified.
2. Diode junction capacitance measured at f=1MHz and applied 4VDC reverse voltage
3. Mounted on P.C.B. with 5.0 x 5.0 mm copper pad areas

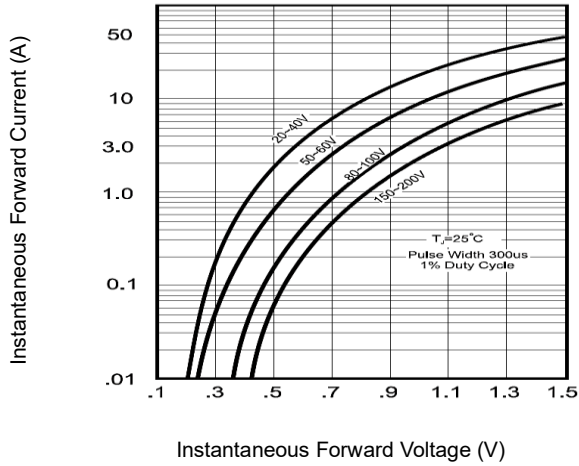
DIMENSIONS

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
G	1.90	
X	1.40	
Y	1.90	

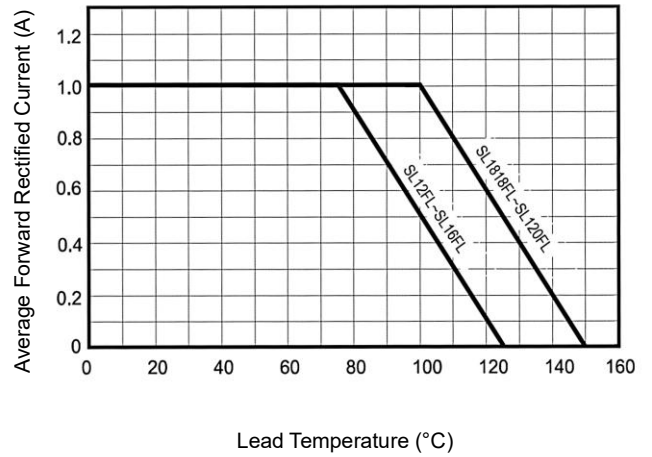


CHARACTERISTIC CURVES

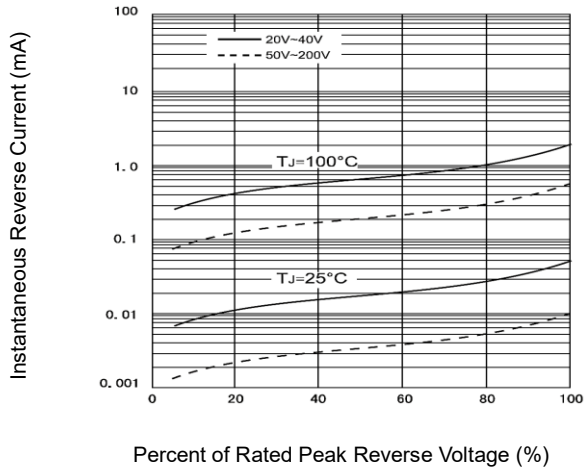
Typical Instantaneous Forward Characteristics



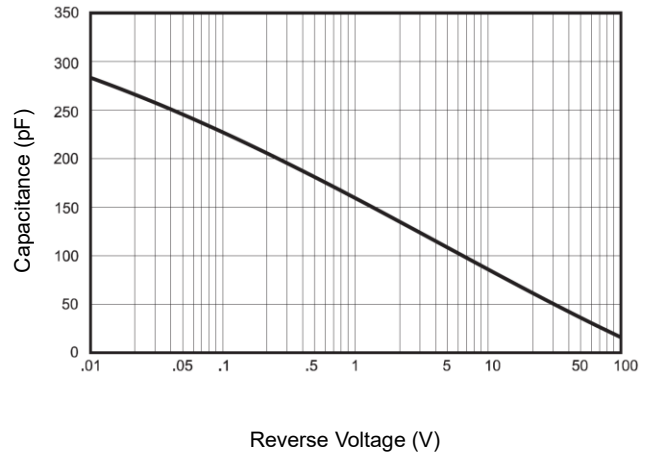
Typical Forward Current Derating Curve



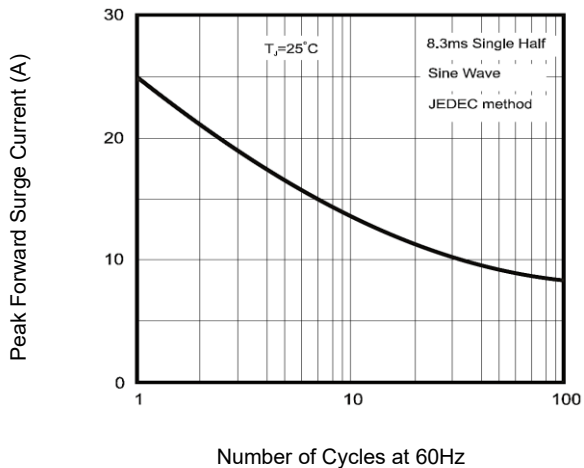
Typical Reverse Characteristics



Typical Diode Junction Capacitance



Maximum Non-Repetitive Forward Surge Current



*Specifications subject to change without notice