Schottky Barrier Rectifier
1A SOD-123FL

DSL1x Series

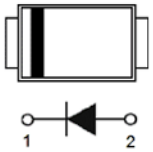
MERITEK

FEATURES



- Wide voltage ranges from 20V to 200V, High 25A surge current capability
- Low forward voltage drops for high-efficiency rectification
- High surge current capability for transient protection
- Minimizes power loss and heat generation

APPLICATIONS



RoHS

- Industrial: DC/DC power converts, automation controller, measurement equipment
- Telecom & Networking: Router and gateway, PoE power, Network Infrastructure
- Consumer Electronics: USB charger, power adapter, LED Lighting, smart device

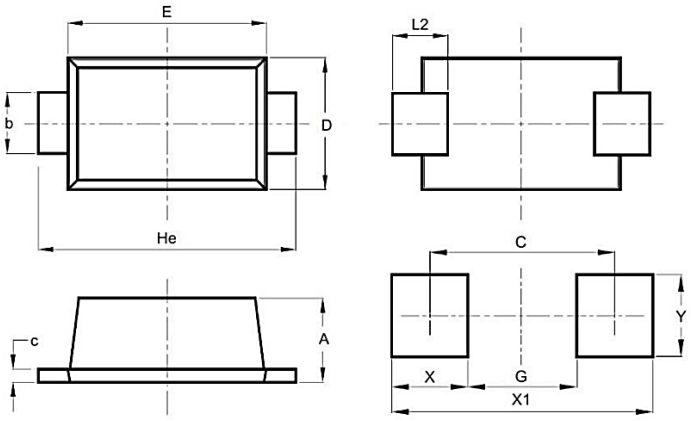
ELECTRICAL CHARACTERISTICS

Parameter		Symbol	DSL 12	DSL 13	DSL 14	DSL 15	DSL 16	DSL 18	DSL 110	DSL 115	DSL 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		$I_{(O)}$	1.0									A
Peak Forward Surge Current, 8.3ms single half-Sinewave Superimposed on Rated Load (JEDEC method)		I_{FSM}	25.0									A
Maximum Forward Voltage at 2.0A		V_F	0.45			0.55		0.75		0.85		V
Maximum Reverse Current at Rated DC Blocking Voltage	T_A=25°C	I_R	1.0									mA
	T_A=100°C		20.0									
Thermal Resistance, Junction to Ambient		$R_{\theta JL}$	92.0									°C/W
Diode Junction Capacitance at 4 V_{DC}		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. Device mounted on P.C.B. with 0.2"x0.2" (5.0 x 5.0mm) copper pad areas

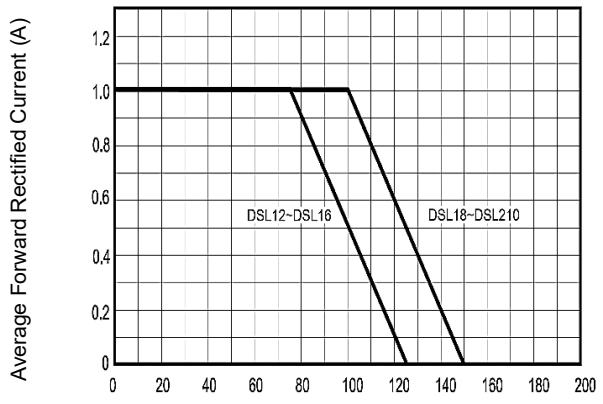
DIMENSIONS

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	3.10	
G	1.90	
X	1.40	
X1	4.70	
Y	1.90	

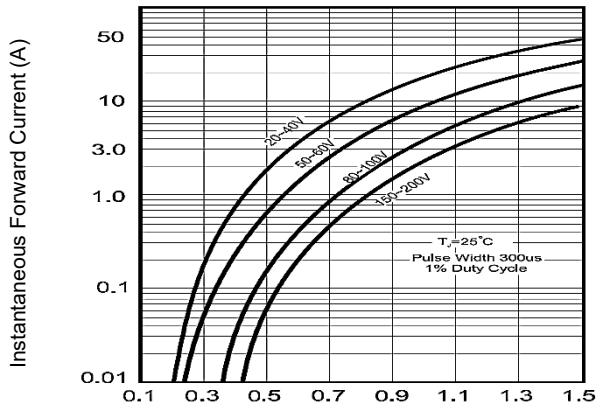


CHARACTERISTIC CURVES

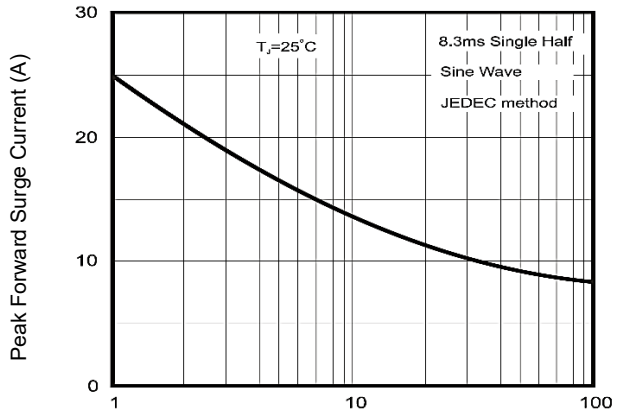
Typical Forward Current Derating Curve



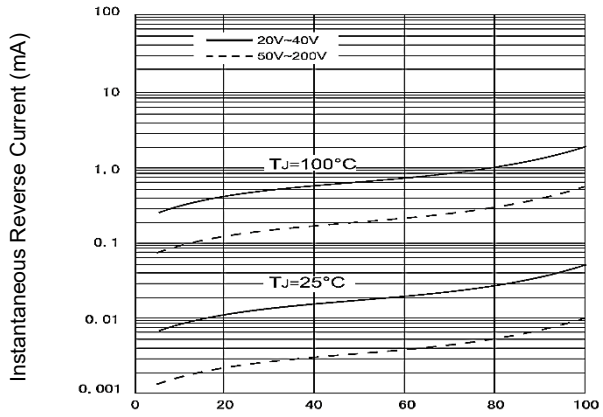
Typical Instantaneous Forward Characteristics



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristics



Typical Junction Capacitance

