



Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 40 to 60 V

Forward Current - 1.0 A

FEATURES

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case: SOD-123FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 15mg 0.00048oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: SL14/ SL16
Simplified outline SOD-123FL and symbol

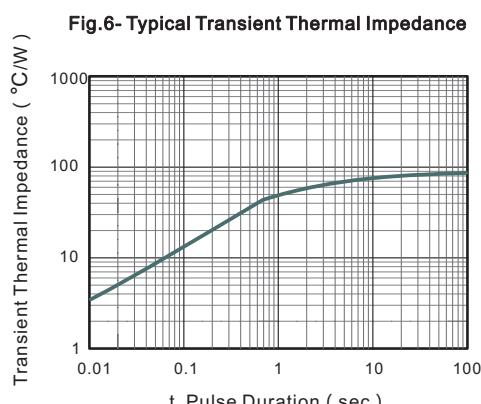
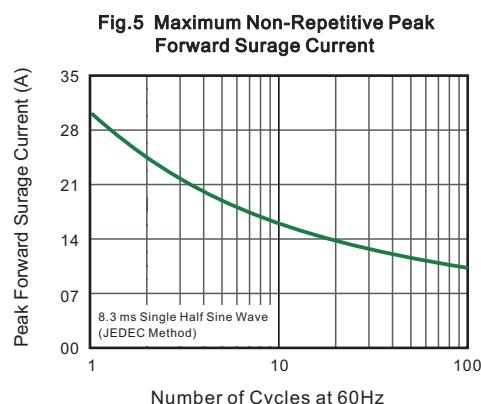
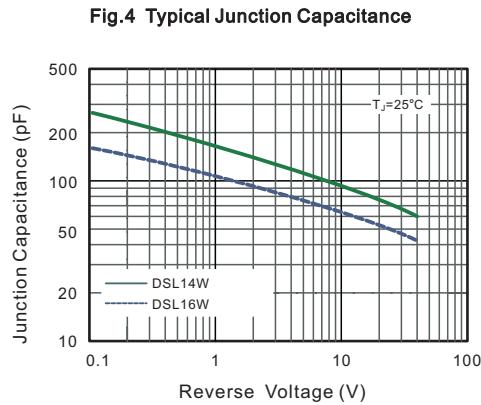
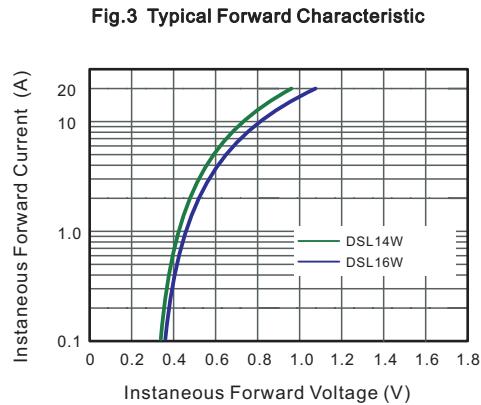
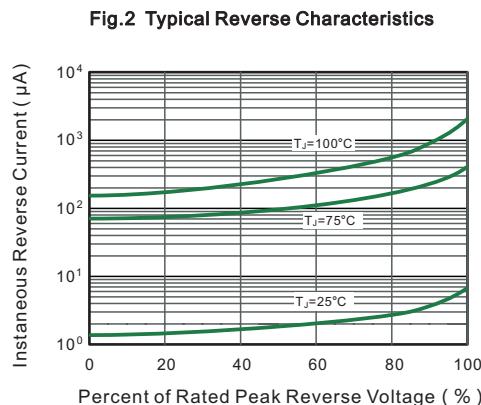
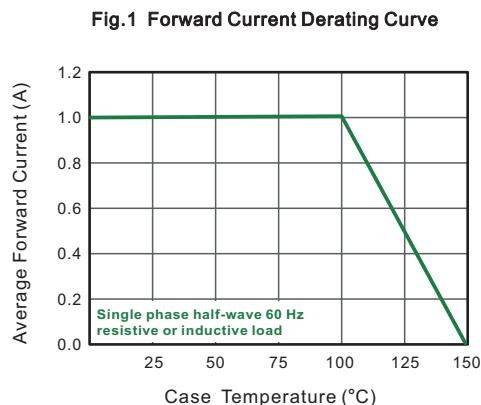
Absolute Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	DSL14W	DSL16W	Units	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	60	V	
Maximum RMS voltage	V_{RMS}	28	42	V	
Maximum DC Blocking Voltage	V_{DC}	40	60	V	
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0			A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30			A
Max Instantaneous Forward Voltage at 1 A	V_F	0.45	0.50	V	
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	I_R	0.2 5		mA	
Typical Junction Capacitance ⁽¹⁾	C_j	180	80	pF	
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	90			°C/W
Operating Junction Temperature Range	T_j	-55 ~ +150			°C
Storage Temperature Range	T_{stg}	-55 ~ +150			°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

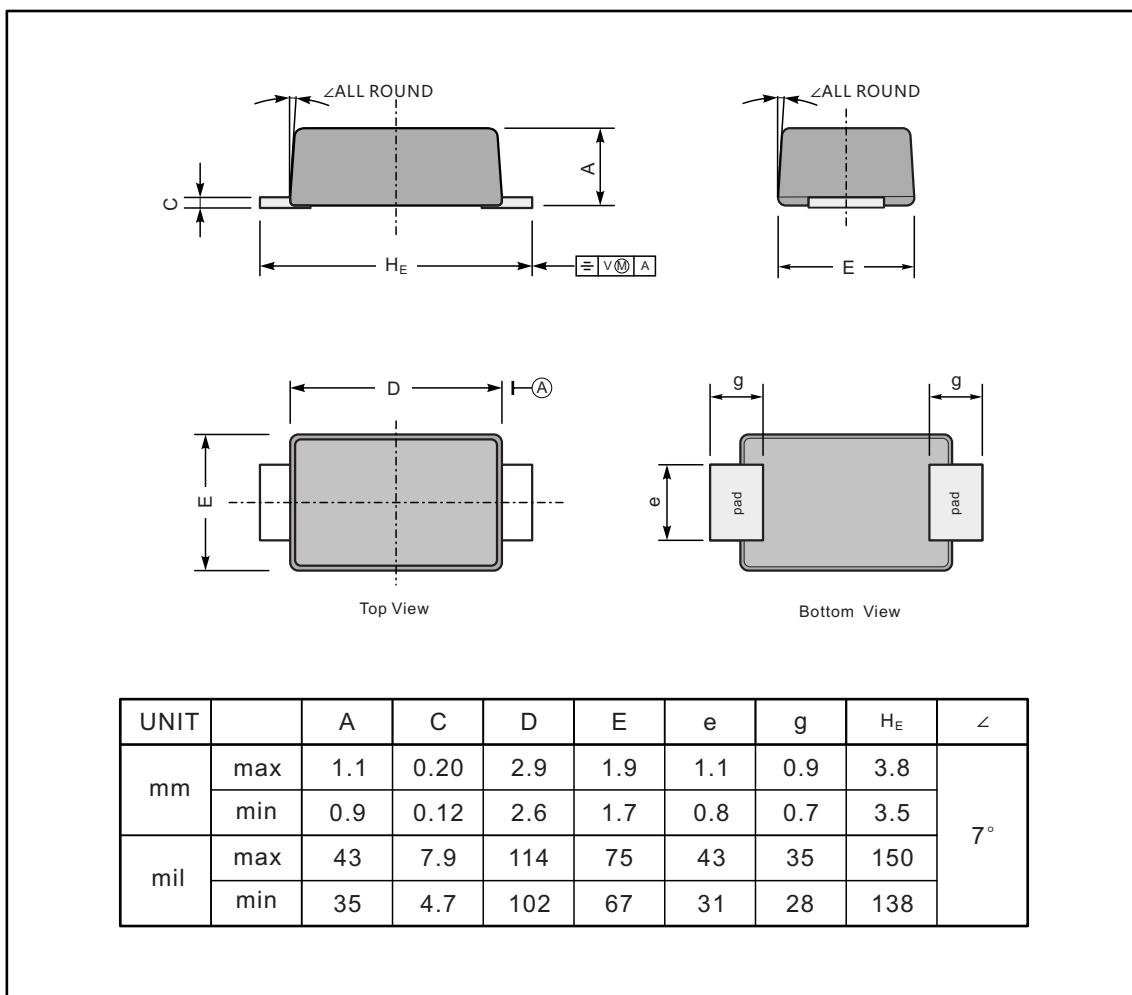




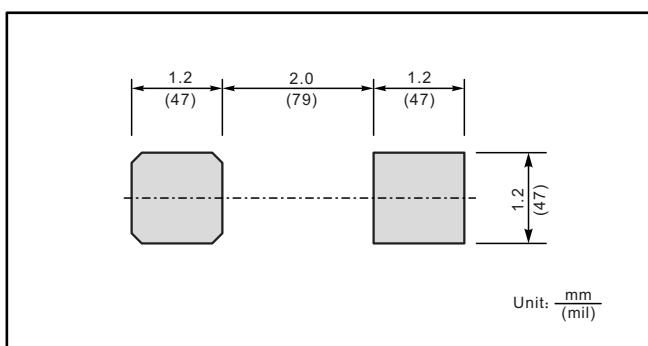
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



The recommended mounting pad size



Marking

Type number	Marking code
DSL14W	SL14
DSL16W	SL16