

DSL14W~DSL16W

Rev.A Oct.-2020



DATA SHEET

/ Revised record

A	2020-10-28				

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/ Descriptions

40V~60V

1.0A

SOD-123FL

Surface Mount Schottky Barrier Rectifier, Reverse Voltage: 40V~60V, Forward Current: 1.0A, SOD-123FL thin package.

/ Features

Low power loss, high efficiency, High forward surge current capability, For use in low voltage, high frequency inverters, and polarity protection applications, For surface mounted applications. Halogen free product.

/ Applications

General purpose.

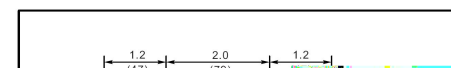
/ Equivalent Circuit



/ Pinning



The recommended mounting pad size



/ Marking

See Marking Instructions.



/ Absolute Maximum Ratings(Ta=25)

参数 Parameter	符号 Symbol	数值 Rating		单位 Unit
		DSL14W	DSL16W	
Maximum Recurrent 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 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30		A
Typical Junction Capacitance ¹⁾	C_i	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

Note:

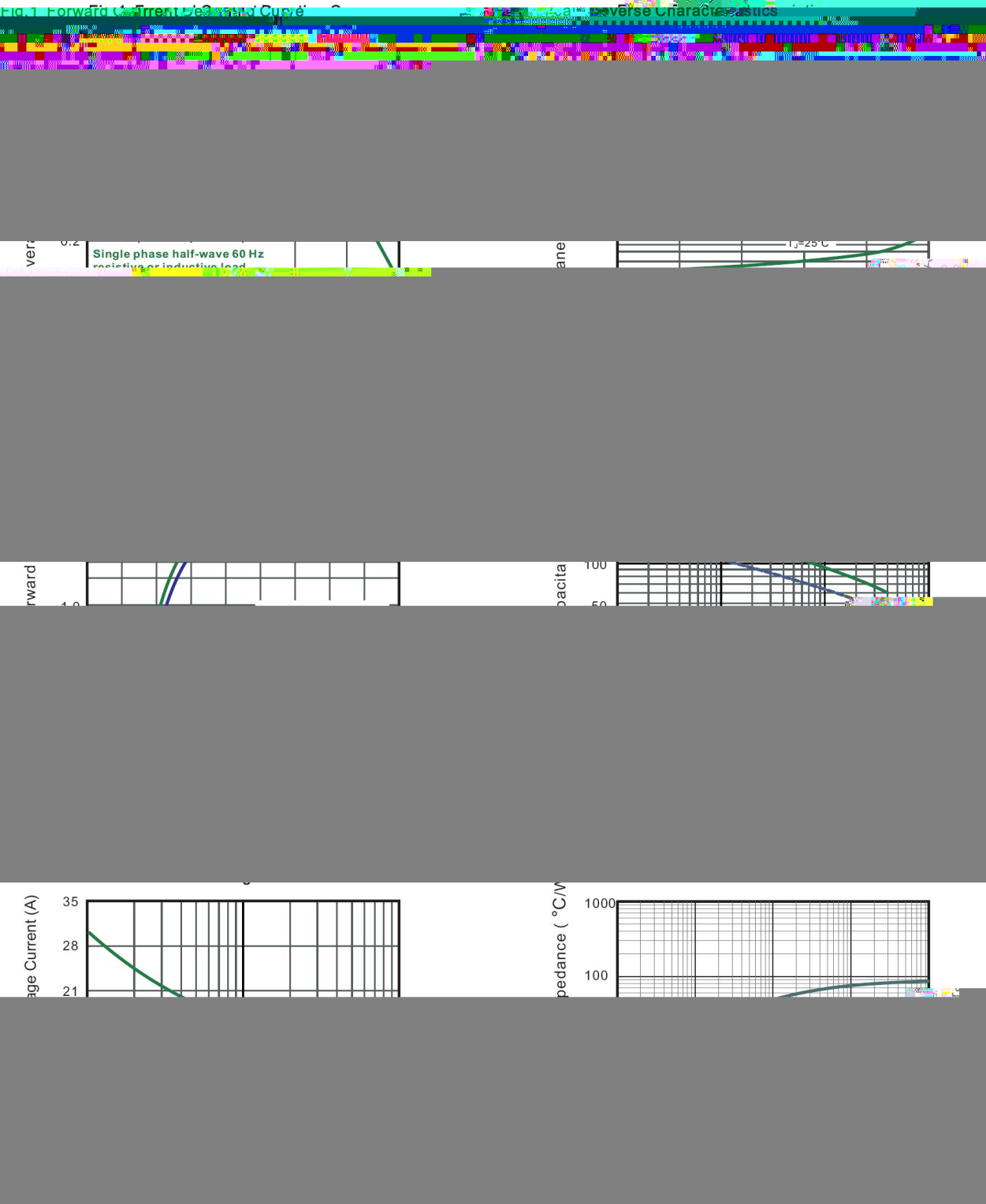
1) Measured at 1MHz and applied reverse voltage of 4 V D.C.

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

/ Electrical Characteristics(Ta=25)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating		单位 Unit
			DSL14W	DSL16W	
Maximum Instantaneous Forward Voltage	V _F	I _F =1.0A	0.45	0.50	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	T _a =25℃	0.2		mA
		T _a =100℃	5		

/ Electrical Characteristic Curve



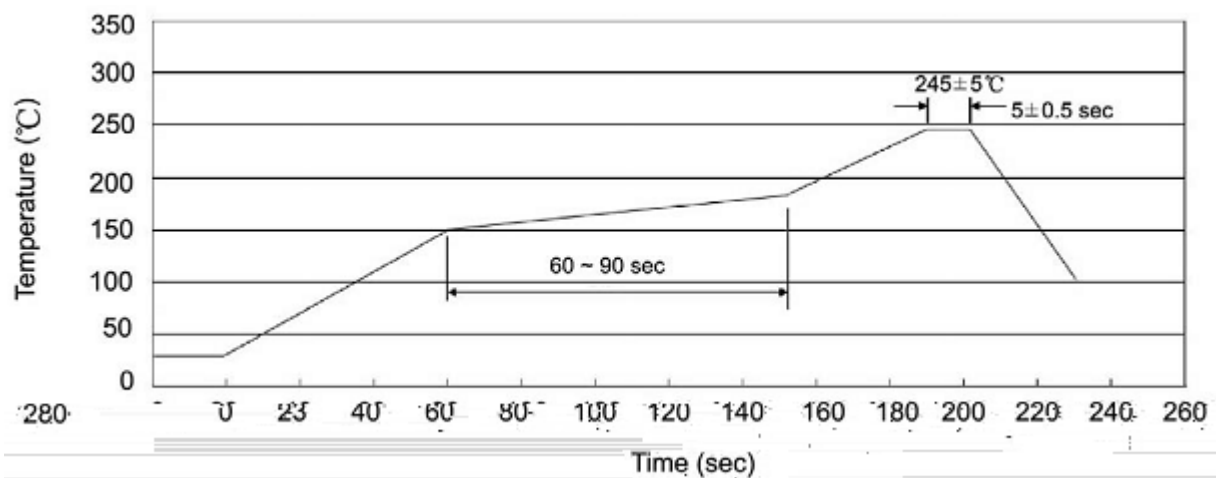
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() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-----------|--------|--|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180°C, Time:60~90sec. |
| 2 | 245±5 | | 5±0.5sec; | | 2.Peak Temp.:245±5°C, Duration:5±0.5sec. |
| 3 | | 2 | 10°C/sec. | | 3. Cooling Speed: 2~10°C/sec. |

/ Resistance to Soldering Heat Test Conditions

260±5°C 10±1 sec. Temp.:260±5°C Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOD-123FL	3000	8	24000	5	120000	7" ×8	185X180X105	390X385X205

/ Notices