

## Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 60 V

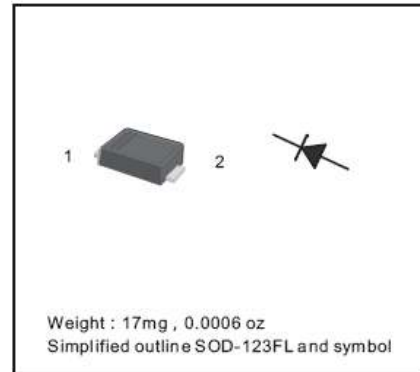
Forward Current - 2.0A

### 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

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### 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			Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	60		V
Maximum RMS voltage	$V_{RMS}$	42		V
Maximum DC Blocking Voltage	$V_{DC}$	60		V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0		A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	50	40	A
Max Instantaneous Forward Voltage at 2 A	$V_F$	0.70	0.85	V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	$I_R$	0.5 10	0.3 5	mA
Typical Junction Capacitance <sup>1)</sup>	$C_j$	220	80	pF
Operating Junction Temperature Range	$T_j$	-55 ~ +125		°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150		°C

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

Fig.1 Forward Current Derating Curve

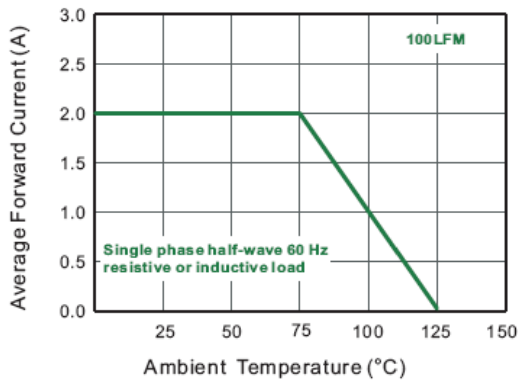


Fig.2 Typical Reverse Characteristics

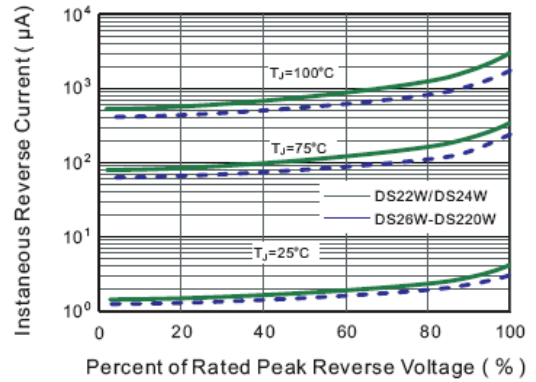


Fig.3 Typical Forward Characteristic

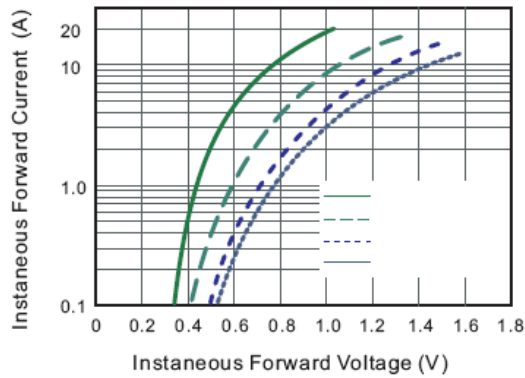


Fig.4 Typical Junction Capacitance

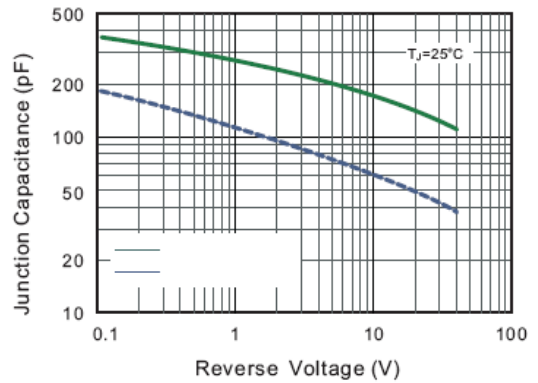
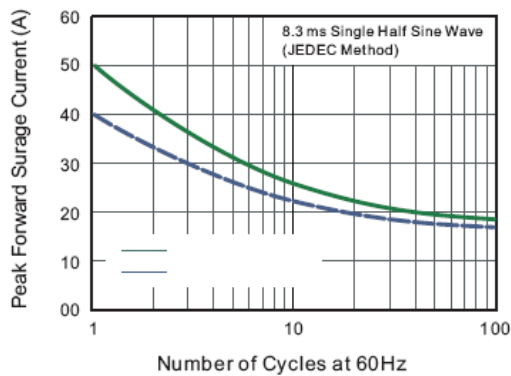


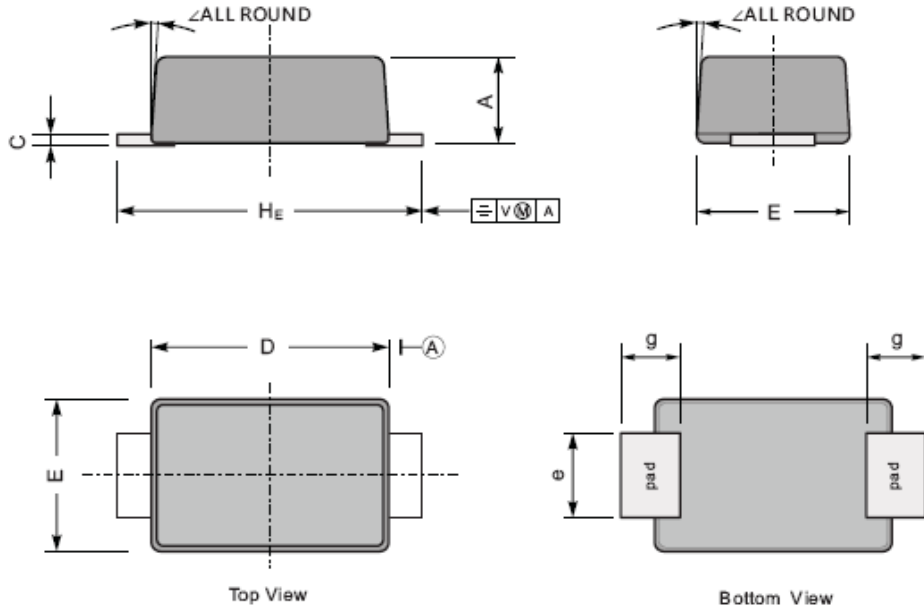
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



## PACKAGE OUTLINE

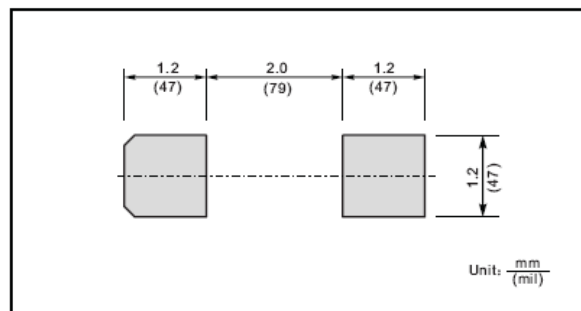
Plastic surface mounted package; 2 leads

SOD123FL

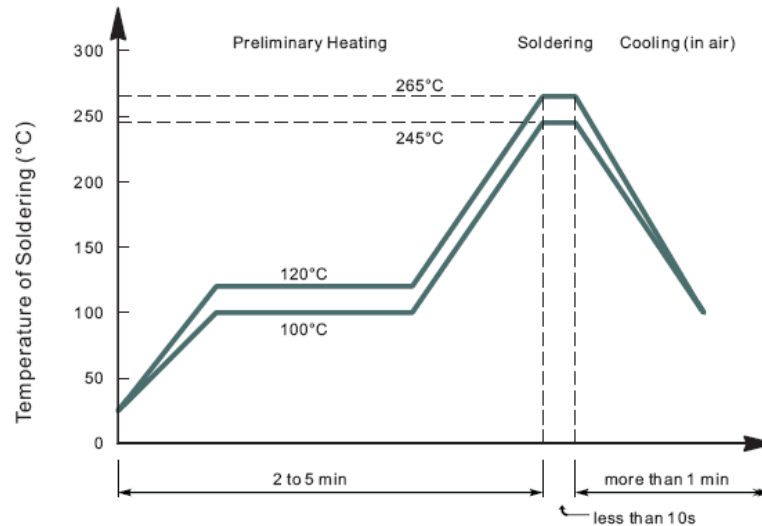


UNIT		A	C	D	E	e	g	HE	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

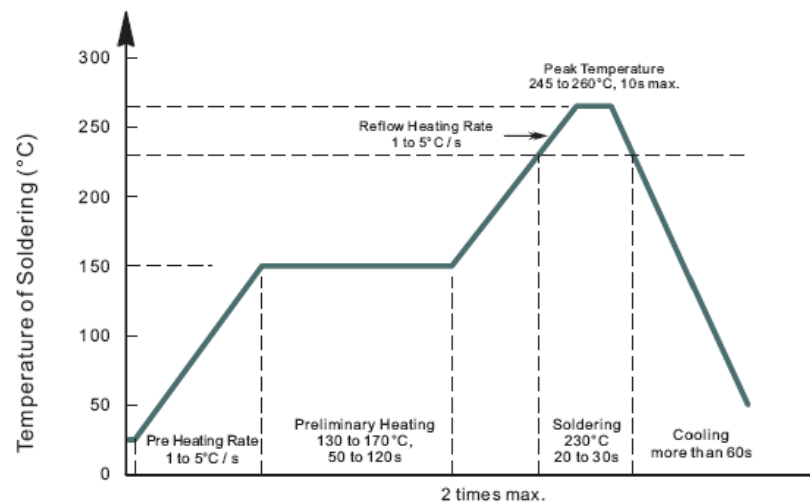
The recommended mounting pad size



• Recommended condition of flow soldering



• Recommended condition of reflow soldering



Recommended peak temperature is over 245 °C. If peak temperature is below 245 °C, you may adjust the following parameters; time length of peak temperature (longer), time length of soldering (longer), thickness of solder paste (thicker)

• Condition of hand soldering

Temperature: 350°C  
Time: 3s max.  
Times: one time

• Remark:

Lead free solder paste (96.5Sn/3.0Ag/0.5Cu)

单击下面可查看定价，库存，交付和生命周期等信息

[>>SHIKUES\(时科\)](#)