

SINLOON®

肖特基二極管

SURFACE MOUNT SCHOTTKY BARRIER DIODE

SS0520-SS0540

SOD-123 500mA

FEATURE:

- ◆ Fast switching diode
- ◆ Low Turn-on voltage
- ◆ PN Junction Guard Ring for transient and ESD protection
- ◆ Designed for Surface Mount Application
- ◆ Plastic Material - UL Recognition Flammability Classification 94V-0

MECHANICAL CHARACTERISTICS:

- ◆ Case: SOD-123 Molded Plastic
- ◆ Weight: 0.01 Grams (approx)
- ◆ Marking: SS0520 B2 (20V/0.5A)
SS0530 B3 (30V/0.5A)
SS0540 B4 (40V/0.5A)
- ◆ Polarity: Cathode Band
- ◆ Terminals: Plated leads solderable per MIL-STD-202, Method 208.
- ◆ Mounting: Position any
- ◆ Lead Free for Rohm / Lead free version and "LF" suffix to part number.

DIMENSION:

Dimension (mm)			
A	3.7 ± 0.2	E	0.2
B	2.7 ± 0.1	F	0.4
C	1.6 ± 0.2	G	1.2 ± 0.15
D	0.55 ± 0.2	H	0.12

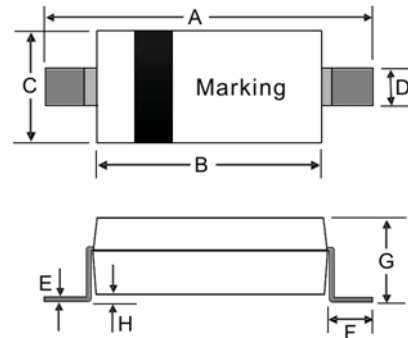
Figure:



Cathode Band Color: white



Electrical Symbol



Maximum Ratings @T_A=25°C unless otherwise specified

Parameter at Tamb = 25°C	Symbol	SS0520	SS0530	SS0540	Unit
DC Blocking Voltage:	V _R	20	30	40	V
Peak Repetitive Reverse Voltage	V _{RRM}	20	30	40	V
Working Peak Reverse Voltage	V _{RWM}	20	30	40	V
Forward Continuous Current:(Note ¹)	I _F	500			mA
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	550			mA
Power Dissipation (Note ¹)	P _d	410			mW
Typical Thermal Resistance, Junction to Ambient Air (Note ¹)	V _{θJA}	244			°C/W
Operating and Storage Temperature Range	T _J , T _{stg.}	-65 to +125			°C

Note¹: Valid provided that electrodes are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS @TA=25°C unless otherwise specified

Characteristic	Symbol	SS0520	SS0530	SS0540	---	---	Unit
Forward Voltage Drop @I _F =0.1/0.5A	V _{FM}	0.3/0.385	0.375/0.43	-/0.51	---	---	V
Peak Reverse Leakage Current @VR=50%/100%	I _{RM}	75/250	20/130	10/20	---	---	uA
DC Blocking Voltage					---	---	
Typical Junction Capacitance (VR=0Vb DC; f=1MHz)	C _j	170	170	170	---	---	pF



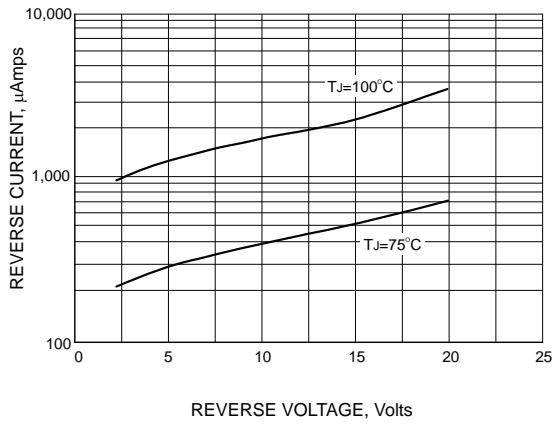
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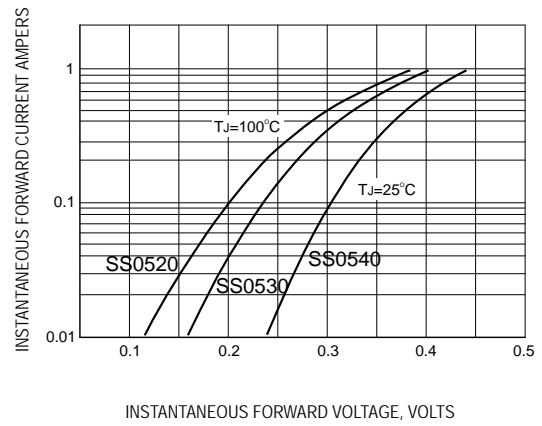
SURFACE MOUNT SCHOTTKY BARRIER DI

SS0520-SS0540

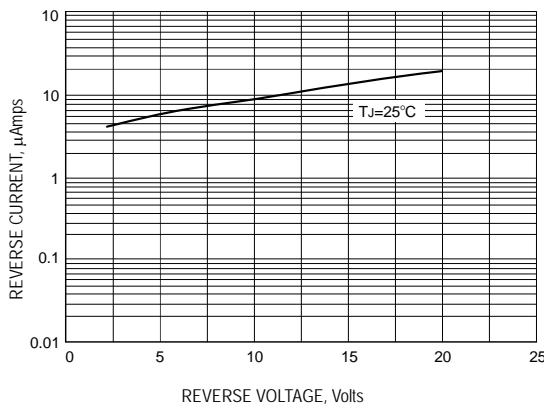
SOD-123 500mA



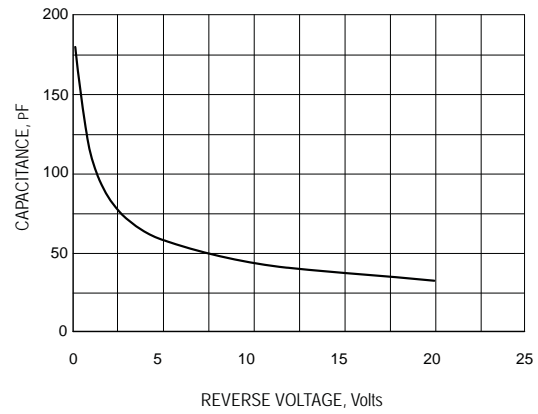
TYPICAL REVERSE CURRENT



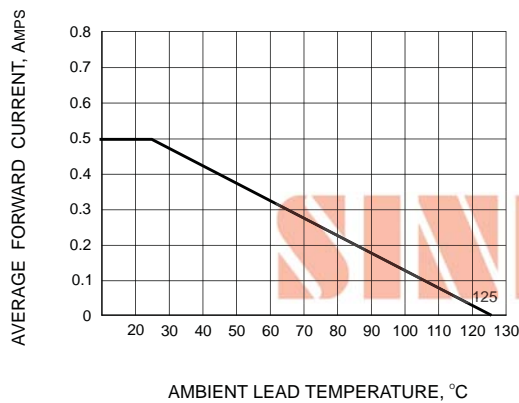
TYPICAL FORWARD VOLTAGE



TYPICAL REVERSE CURRENT



TYPICAL JUNCTION CAPACITANCE



CURRENT DERATING

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RECOMMENDED SOLDERING PROFILE:

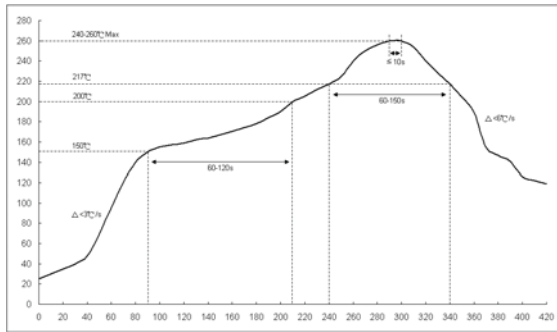


Fig 1: Reflow soldering profile for lead-free solder (SnAgCu)

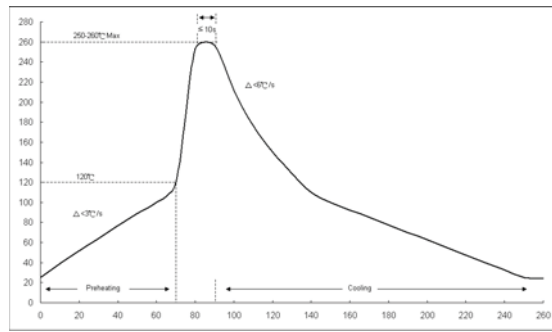
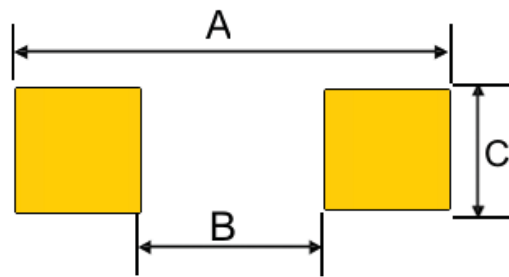


Fig 1: Wave soldering profile.

RECOMMENDED SOLDERING FOOTPRINT

TYPE	Dimension (mm)		
	A	B	C
SS0520	4.2	2.36	1.22
SS0530			
SS0540			



MARKING INFORMATION

Cathode: Polarity Band
Marking: Device Code (B2/B3/B4)



COMMON PACKING INFORMATION:

Product Number:	Package Type	Packing Quantity	Carton Quantity	Apporx Gross Weight
SS0502/SS0503/SS0504	SOD-123	3000 Tape & Reel	150,000 Ctn	10 Kg

Reel Diameter (mm)	Quantity (Pcs)	Inner Box Size (mm)	Carton Size (mm)
178	3000	L: 187 x W:187 x H: 65	L:390 x W:240 x H:420

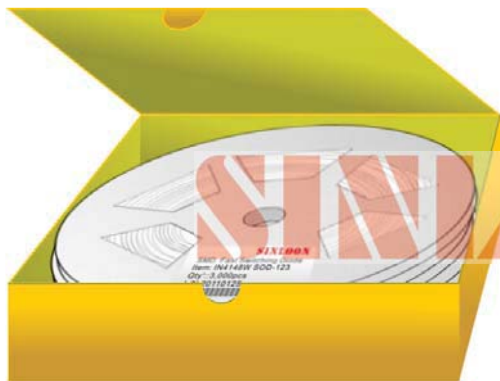
Reel Tape Fig-1



Carton Pack Fig-3



Inner Box Fig-2



※ 美隆電子產品規格特性參數的改變或更新,將不會另行通知。
※ Mayloon characteristic parameters of electronic product specification changes or updates without prior notice.

