



貼片開關二極管
SURFACE MOUNT FAST SWITCHING DIODE

IN4148W
SOD-123 75V 0.15A

FEATURE:

- Fast switching diode.
- High Conductance
- For general purpose switching application
- Lead free and RoHS compliance components.
- Plastic material - UL recognition flammability classification 94V-0

MECHANICAL CHARACTERISTICS:

- Case: SOD-123, Mplded plastic.
- Weight: 0.01 grams (approx)
- Polarity: Cathode band.
- Marking: A2
- Terminals: Plated Leads solderable per MIL-STD-202, Method 208
- Lead Free: For **RoHS** Lead Free version.

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

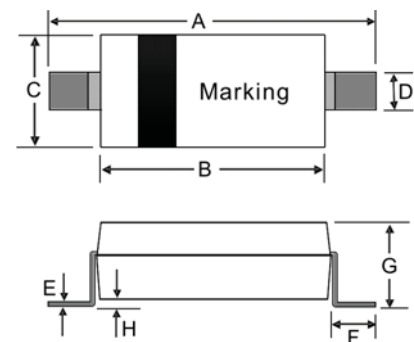
Figure:



Cathode Band Color: white



Electrical Symbol



Maximum Ratings @ $T_A=25^\circ\text{C}$ unless otherwise specified

Parameter at $T_{amb} = 25^\circ\text{C}$	Symbol	IN4148W (SOD-123)	Unit
DC Blocking Voltage:	V_R	75	V
Non-Repetitive Peak Reverse Voltage:	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current:(note 1)	I_{FM}	300	mA
Average Rectified Output Current (Note 1)	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @ $t=1.0\mu\text{s}$	I_{FSM}	2.0	A
Non-Repetitive Peak Forward Surge Current @ $t=1.0\text{s}$		1.0	
Power Dissipation (Note 1)	P_d	410	mW
Typical Thermal Resistance, Junction to Ambient Air	$V_{\theta JA}$	315	K/W
Operating and Storage Temperature Range	$T_J, T_{STG.}$	-65 to +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	IN4148W (SOD-123)	Unit
Forard Voltage Drop @ $I_F=10\text{mA}$	V_{FM}	1.0	V
Peak Reverse Leakage Current @ $V_R=20\text{V}$	I_{RM}	25	nA
		@ $V_R=-75\text{V}$	5.0
Typical Junction Capacitance ($V_R=0\text{VDC}, f=1\text{MHz}$)	C_j	2.0	pF
Reverse Recovery Time (Note 2)	t_{rr}	4.0	nS

Note:

1. Valid provided that electrodes are kept at ambient temperature.
2. Measured with $I_F = I_R = 10\text{mA}$, $I_{RR} = 0.1 \times I_R$, $R_L = 100\Omega$,



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TYPICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

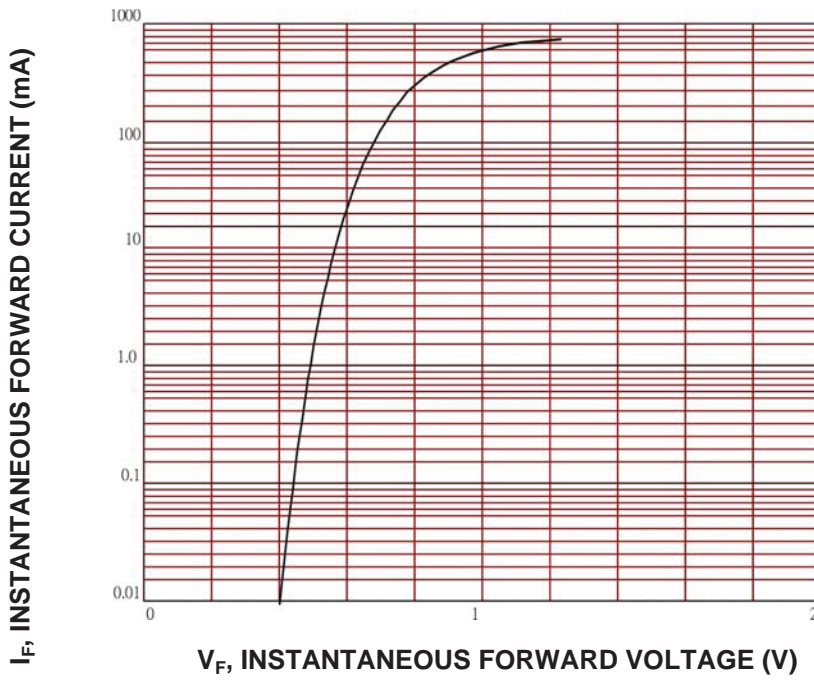


Fig-1 Forward Characteristics

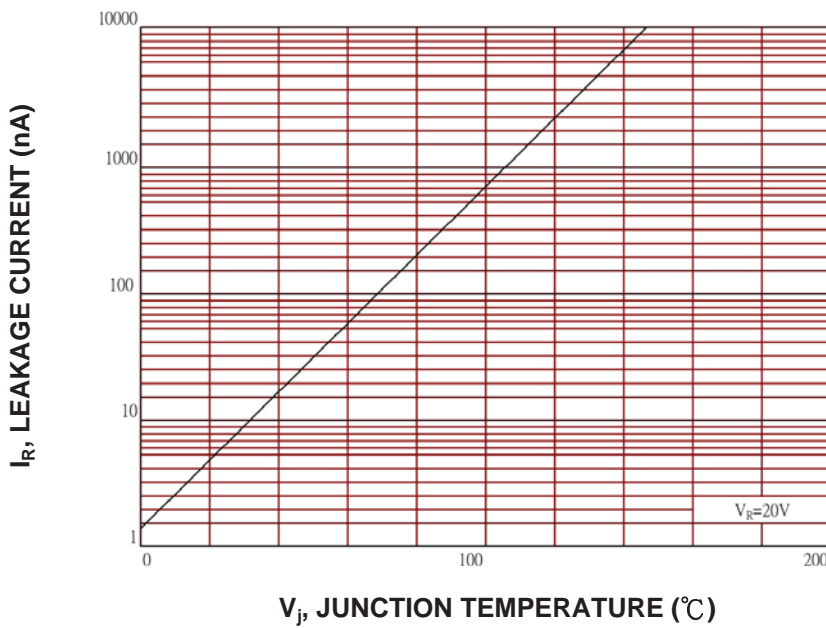


Fig-2 Leakage Current vs Junction Temperature.

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RECOMMENDED SOLDERING PROFILE:

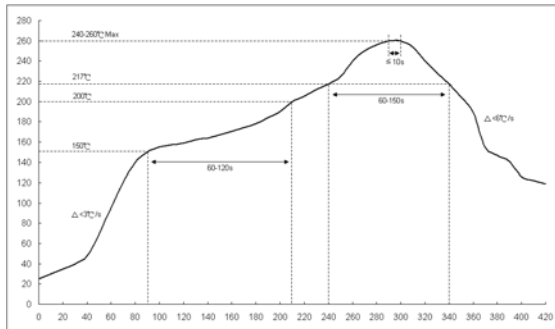


Fig 1: Reflow soldering profile for lead-free solder (SnAgCu)

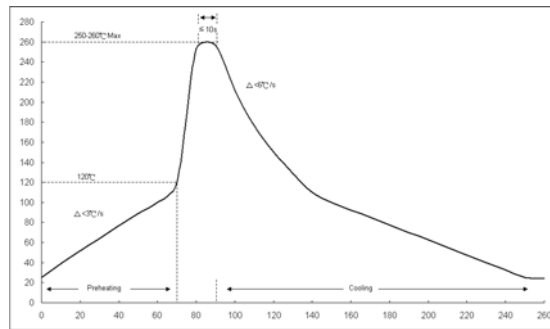
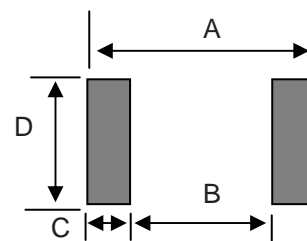


Fig 1: Wave soldering profile.

RECOMMENDED SOLDERING FOOTPRINT

TYPE	Dimension (mm)			
	A	B	C	D
IN4148W	4.2	2.36	0.91	1.22



MARKING INFORMATION

Cathode: Polarity Band
Marking: Device Code (A2)



COMMON PACKING INFORMATION:

Product Number:	Package Type	Packing Quantity	Carton Quantity	Apporx Gross Weight
IN4148W	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

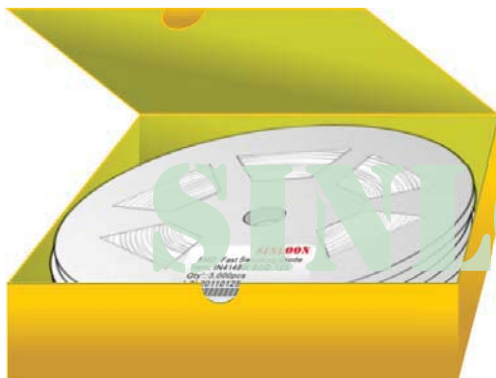
Reel Tape Fig-1



Carton Pack Fig-3



Inner Box Fig-2



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※ Mayloon characteristic parameters of electronic product specification changes or updates without prior notice。

