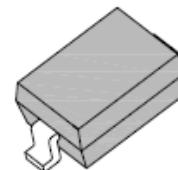


Two Terminals SMD Switching Diodes

Features

- Fast Switching Speed
- Electrically Identical to Standard JEDEC
- High Conductance
- RoHS Compliant and Halogen Free



SOD-123

Mechanical Data

Case:	SOD-123, Plastic Case
Terminals:	Solderable per MIL-STD-750, Method 2026
Weight:	0.01 gram

HALOGEN
FREE



Maximum Ratings ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	1N4148W	1N4448W	Unit	Conditions
	Marking Code	A2	A3		
VR	Reverse Voltage	75		V	
VRRM	Peak Reverse Voltage	100		V	
VRMS	RMS Voltage	50		V	
VDC	DC Blocking Voltage	75		V	
IF(AV)	Forward Average Current	150		mA	
IFSM	Peak Forward Surge Current, Pulse Width=1.0µs	4		A	
PD	Power Dissipation above 25°C	410	500	mW	
VF	Forward Voltage	0.715 @ 0.001A 0.855 @ 0.01A 1 @ 0.05A 1.25 @ 0.15A	0.72 @ 0.005A 1 @ 0.1A	V	
IR	Max. DC Reverse Current at Rated DC Blocking Voltage, $T_J=25^{\circ}C$	0.025	-	µA	VR=20V
		2.5	2.5		VR=75V
CD	Diode Capacitance	1.5	4	pF	VR=0V, f=1MHz
Trr	Reverse Recovery Time	4		ns	From IF=10mA to IR=1mA, VR=6V, RL=100Ω
RθJA	Typical Thermal Resistance	Junction to Ambient	450	° C/W	Note 1
RθJC		Junction to Case	125	° C/W	Note 2
TJ, TSTG	Operating Junction and Storage Temperature Range	-55 to +150		° C	

Note 1: Part mounted on FR-4 PCB with minimum recommended pad layout.

2. Part mounted on PCB with 3.15 x 2.36 x 0.04" (80 x 60 x 1.0mm) copper pad area.

Two Terminals SMD Switching Diodes

1N4148W 1N4448W

Typical Characteristics Curves

Fig.1- Power Derating Curve for 1N4148W

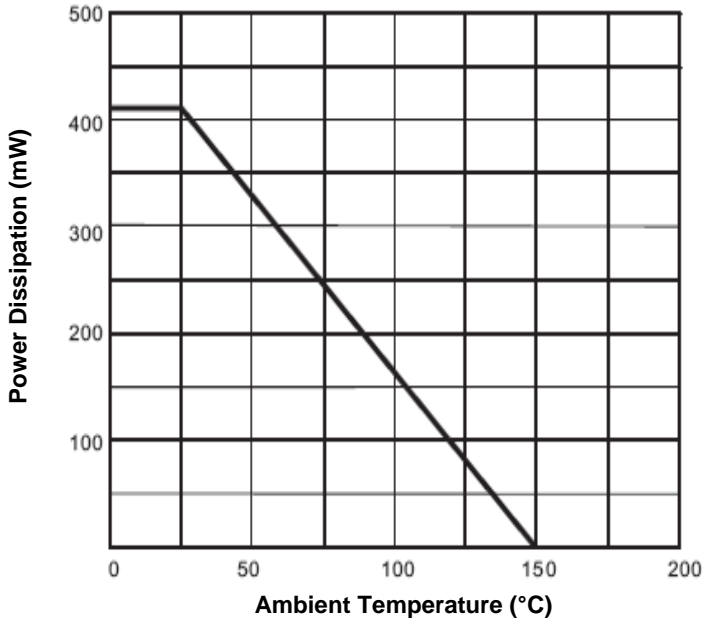


Fig.1- Power Derating Curve for 1N4448W

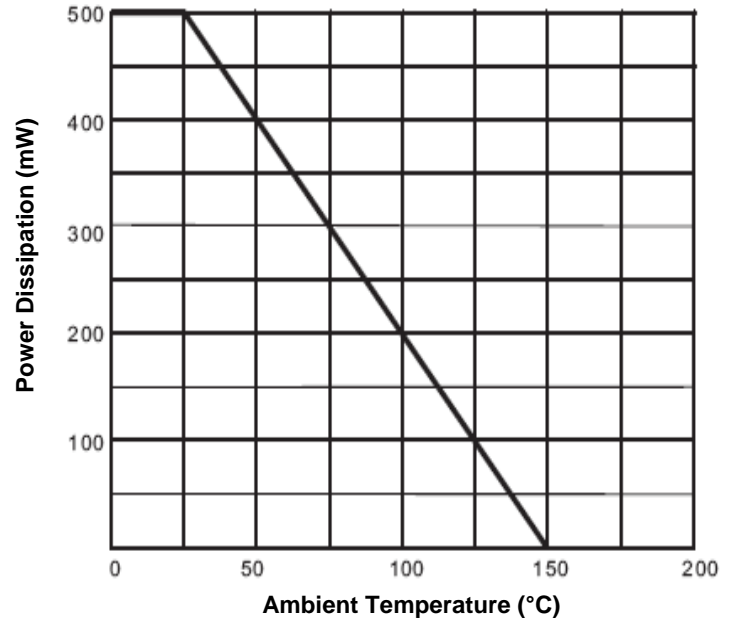


Fig.3- Typical Instantaneous Forward Characteristics

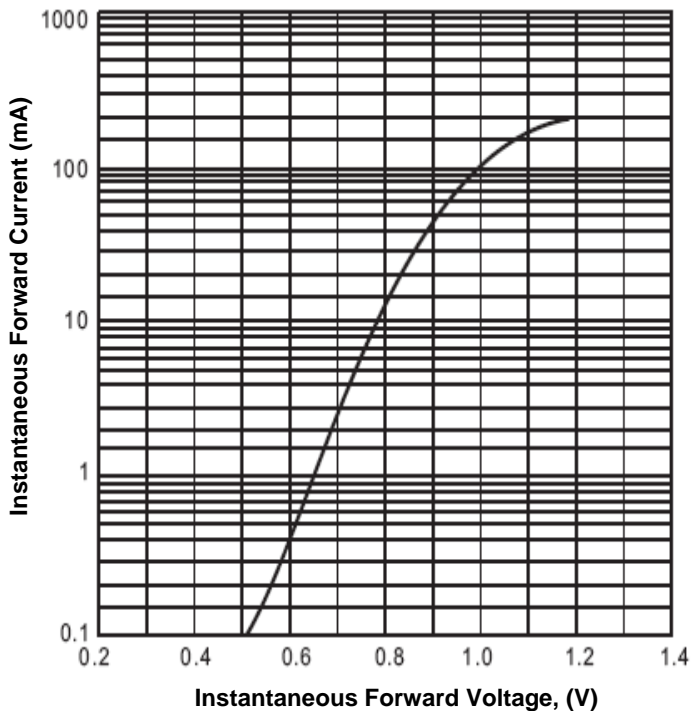
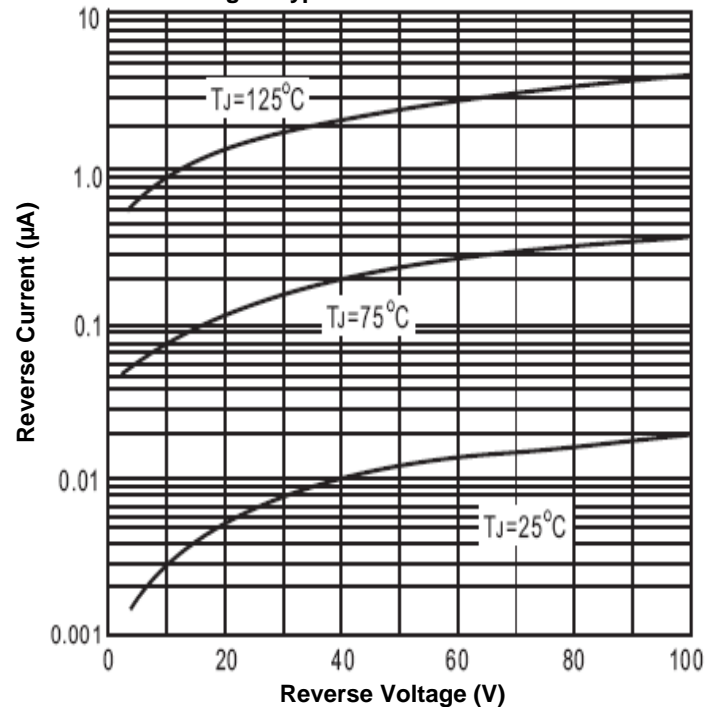


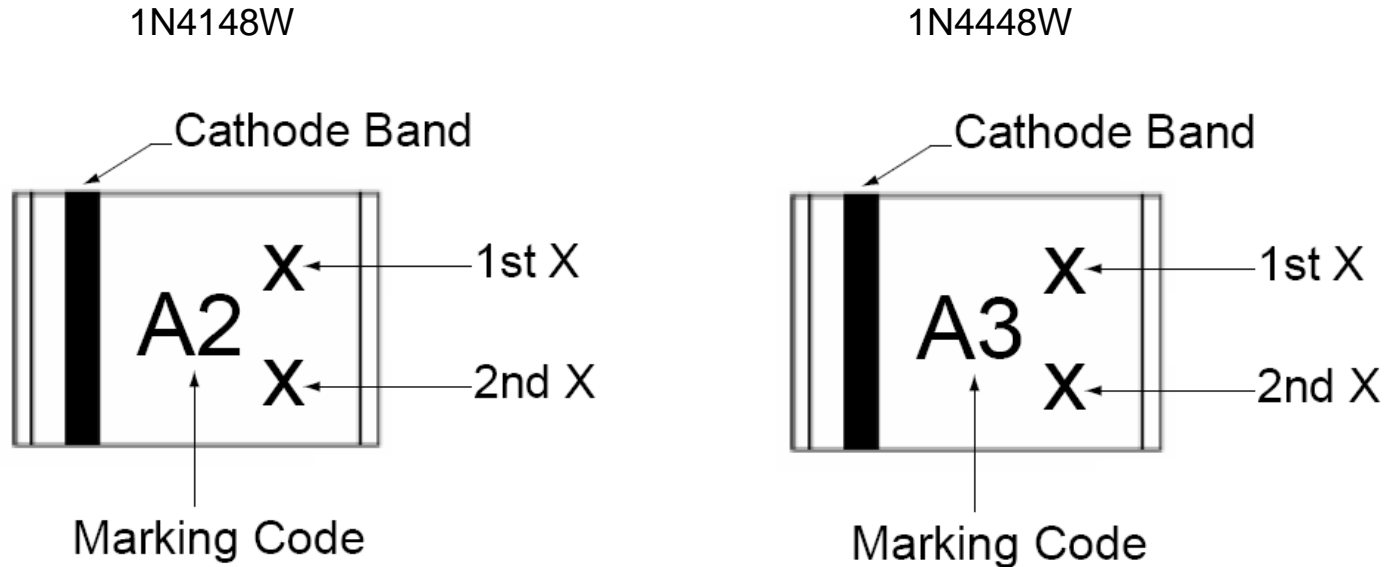
Fig.4- Typical Reverse Characteristics



Two Terminals SMD Switching Diodes

1N4148W 1N4448W

Marking Information:



XX: Date Code

1. Odd year such as 2011, 2013, 2015, 2017, 2019

week tens digit	0	1	2	3	4	5				
1st X	0	1	2	3	4	5				
week units	0	1	2	3	4	5	6	7	8	9
2nd X	0	1	2	3	4	5	X	7	8	N

For example: year 2011 week 19, XX shows 1N

2. Even year such as 2010, 2012, 2014, 2016, 2018

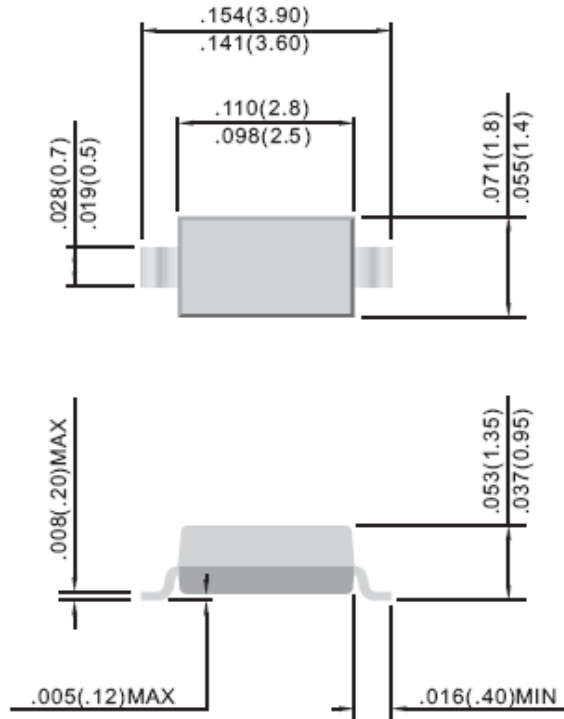
week tens digit	0	1	2	3	4	5				
1st X	E	N	K	H	R	V				
week units	0	1	2	3	4	5	6	7	8	9
2nd X	0	1	2	3	4	5	X	7	8	N

For example: year 2012 week 28, XX shows K8

Two Terminals SMD Switching Diodes

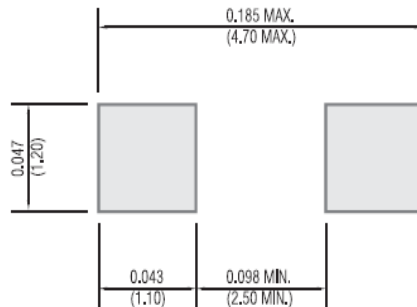
1N4148W 1N4448W

Dimensions in inch (mm)



SOD-123

Mounting Pad Layout in inch (mm)

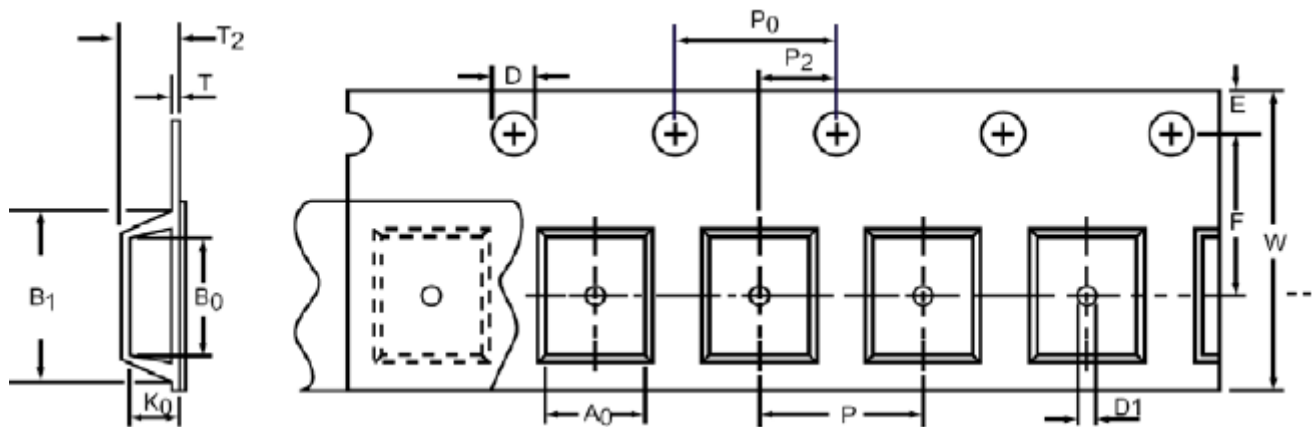


Two Terminals SMD Switching Diodes

1N4148W 1N4448W

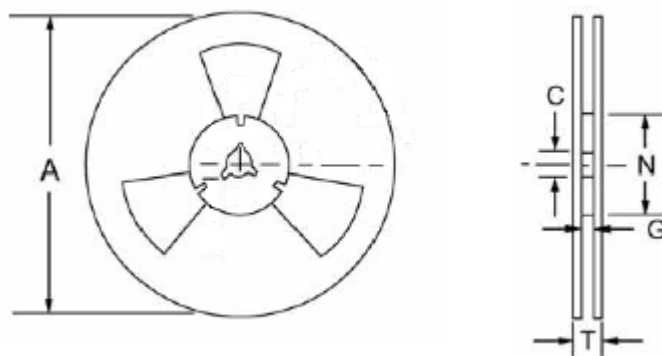
Packing Information:

Carrier Tape Dimensions (in mm)



Product Type	D	P0	P	W	E	A0	B0
		1.55±0.05	4.0±0.10	4.0±0.10	8.0+0.15/-0.3	1.75±0.10	1.55±0.10
SOD-123	B1	T	T2	D1	F	K0	P2
	4.0±0.10	0.20±0.05	1.2±0.1	1.0±0.10	3.5±0.05	1.55±0.10	2.0±0.05

Reel Dimensions (in mm)



A	C	G	N	T
178.0±2.0	13.5±1.0	9.9 max.	50 min.	14.4 max.

Two Terminals SMD Switching Diodes

1N4148W 1N4448W

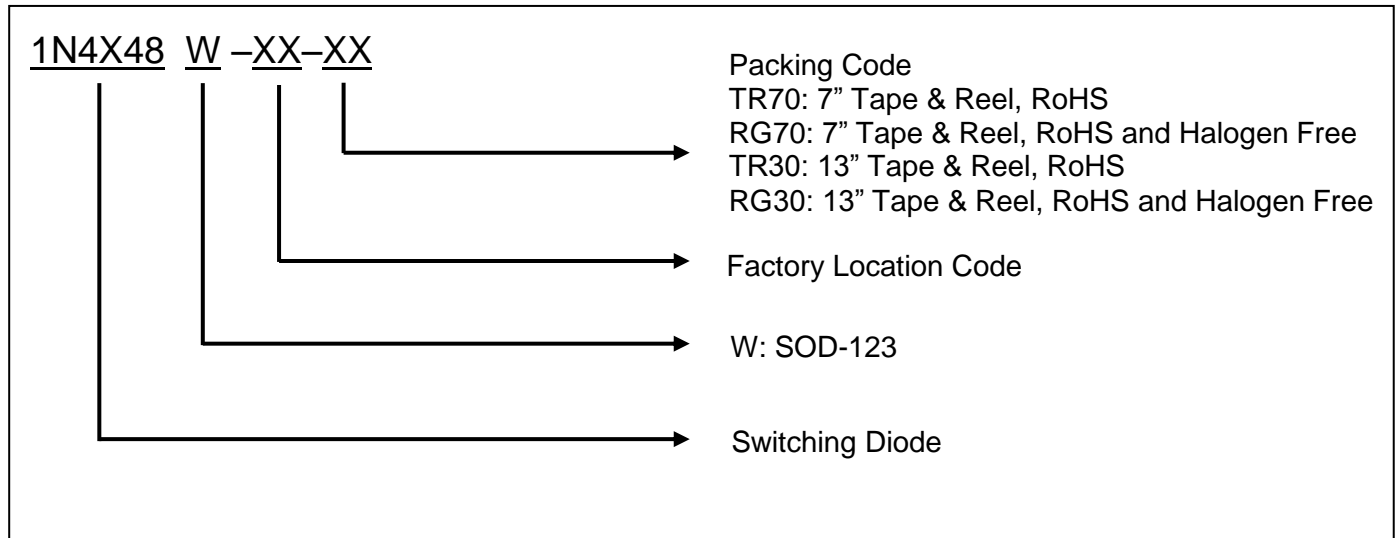
Packing Quantity Information:

Quantity	PCS per Reel	PCS per Carton
TR70 Tape & Reel	3000	240000
TR30 Tape & Reel	10000	120000

Carton Size Information:

	Carton Size
TR70	390X270X400 (in mm)
TR30	375X360X213 (in mm)

How to Order



Two Terminals SMD Switching Diodes

1N4148W 1N4448W

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