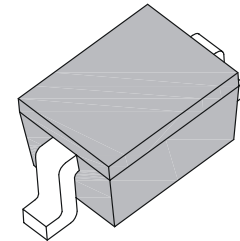


## Two Terminals SMD Switching Diode

### Features

- Low Forward Voltage
- Fast Reverse Recovery Time
- Small Total Capacitance
- RoHS Compliant



SOD-323

### Mechanical Data

<b>Case:</b>	SOD-323, Plastic Case
<b>Terminals:</b>	Solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Color band denotes cathode end
<b>Weight:</b>	Approx. 0.0041 gram

### Maximum Ratings *(T<sub>Ambient</sub>=25°C unless noted otherwise)*

Symbol	Description	TWD4148-160WS	Unit	Conditions
	Marking Code	UF		
<b>VRM</b>	Max. Reverse Voltage	80	V	
<b>VRRM</b>	Peak Reverse Voltage	85	V	
<b>IFM</b>	Max. Peak Forward Current	300	mA	
<b>IF(AV)</b>	Max. Forward Average Current at T <sub>A</sub> =25° C	100	mA	
<b>IFSM</b>	Peak Forward Surge Current, Pulse Width=10mS	2.0	A	
<b>PD</b>	Power Dissipation	200	mW	Note
<b>TJ</b>	Junction Temperature	150	° C	
<b>TSTG</b>	Storage Temperature Range	-55 to +150	° C	

**Note:** Mounted on a glass epoxy circuit board of 20x20mm, pad dimension of 4x4mm.

# Two Terminals SMD Switching Diode

## TWD4148-160WS

### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	TYP.	MAX.	Unit	Conditions
<b>V<sub>F</sub></b>	Max. Forward Voltage	0.60	-	V	I <sub>F</sub> =1mA
		0.72	-		I <sub>F</sub> =10mA
		0.90	1.20		I <sub>F</sub> =100mA
<b>I<sub>R</sub></b>	Reverse Current	-	0.5	μA	V <sub>R</sub> =80V
<b>C<sub>T</sub></b>	Total Capacitance	0.9	3.0	pF	V <sub>R</sub> =0V, f=1MHz
<b>T<sub>rr</sub></b>	Max. Reverse Recovery Time	1.6	4.0	nS	I <sub>F</sub> =10mA ,

### Typical Characteristics Curves

Fig.1- Typical Instantaneous Forward Characteristics

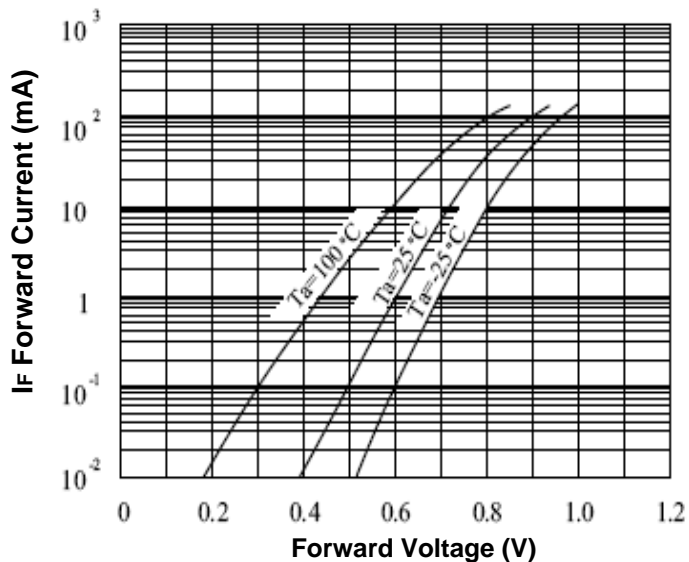
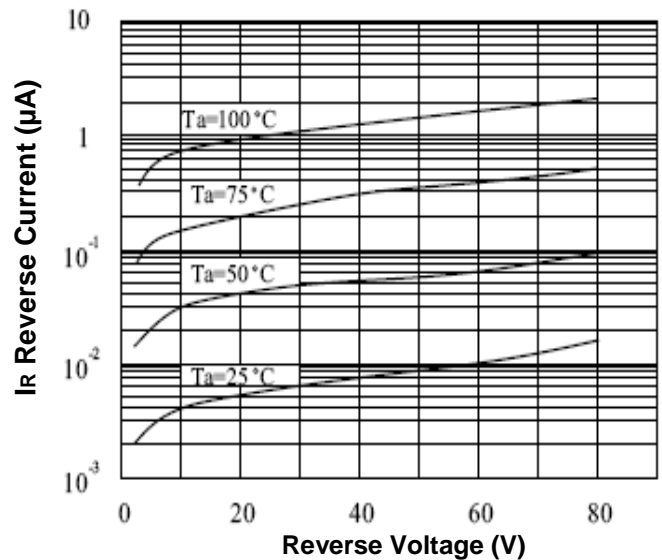


Fig.2- Typical Instantaneous Reverse Characteristics Curve



# Two Terminals SMD Switching Diode

## TWD4148-160WS

Fig.3-  $C_T - V_R$

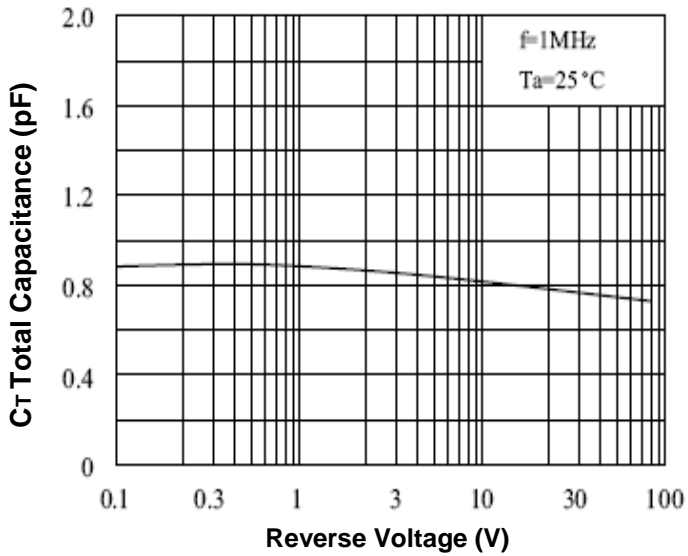


Fig.4-  $T_{rr} - I_F$

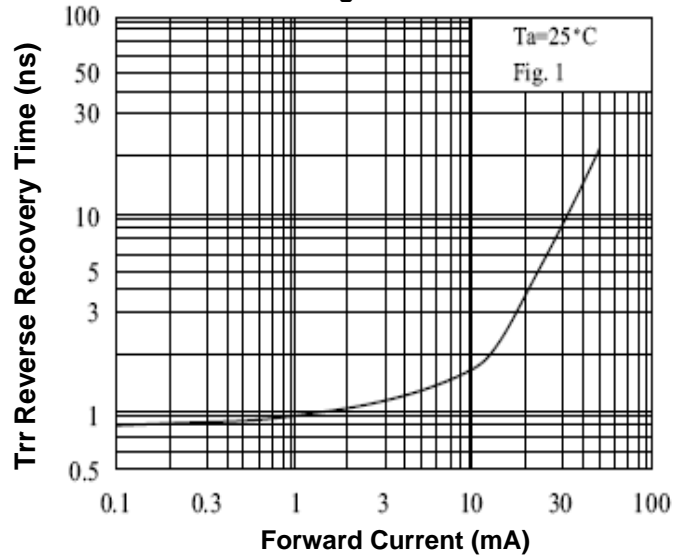
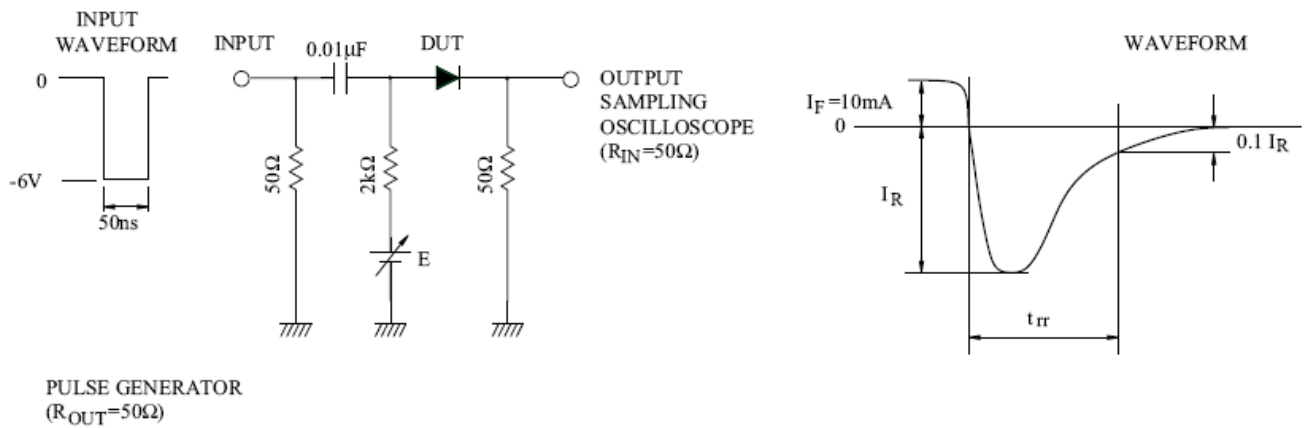


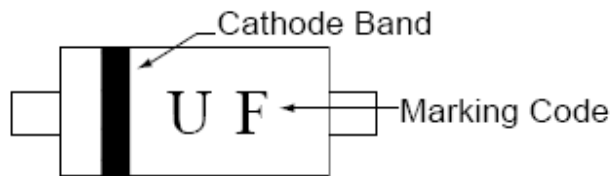
Fig. 1. REVERSE RECOVERY TIME( $t_{rr}$ ) TEST CIRCUIT



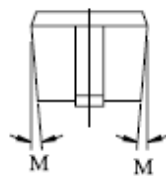
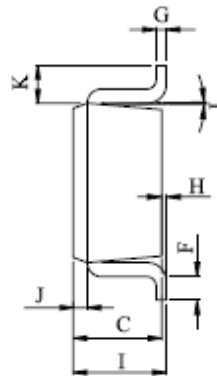
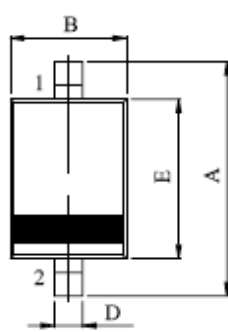
# Two Terminals SMD Switching Diode

## TWD4148-160WS

### Marking Information:



### Dimensions in mm



1. ANODE
2. CATHODE

DIM	MILLIMETERS
A	2.50±0.1
B	1.25±0.05
C	0.90±0.05
D	0.30+0.06/-0.04
E	1.70±0.05
F	MIN 0.17
G	0.126±0.03
H	0~0.1
I	1.0 MAX
J	0.15±0.05
K	0.4±0.05
L	2°+4/-2
M	4~6°

SOD-323

## Two Terminals SMD Switching Diode

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TWD4148-160WS

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