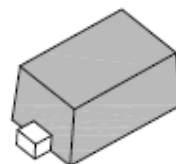


Two Terminals SMD Switching Diode

Features

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



SOD-523

Mechanical Data

Case:	SOD-523, Plastic Case
Terminals:	Solderable per MIL-STD-750, Method 2026
Polarity:	Color band denotes cathode end
Weight:	Approx. 0.0016 gram

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

Symbol	Description	TWD4148-160WT	Unit	Conditions
	Marking Code	UF		
V_{RM}	Reverse Voltage	80	V	
V_{RRM}	Peak Reverse Voltage	85	V	
I_{FM}	Max. Peak Forward Current	300	mA	
$I_{F(AV)}$	Max. Forward Average Current at $T_A=25^{\circ}C$	100	mA	
I_{FSM}	Peak Forward Surge Current, Pulse Width=1.0us	2.0	A	
P_D	Power Dissipation Derate above $25^{\circ}C$	-	mW	
T_J	Junction Temperature	150	$^{\circ}C$	
T_{STG}	Storage Temperature Range	-55 to +150	$^{\circ}C$	

Two Terminals SMD Switching Diode

TWD4148-160WT

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

Symbol	Description	TYP.	MAX.	Unit	Conditions
V_F	Max. Forward Voltage	0.6	-	V	$I_F=1\text{mA}$
		0.72	-		$I_F=10\text{mA}$
		0.9	1.2		$I_F=100\text{mA}$
I_R	Reverse Current	-	0.5	μA	$V_R=80\text{V}$
C_T	Total Capacitance	0.9	3.0	pF	$V_R=0\text{V}$, $f=1\text{MHz}$
T_{rr}	Max. Reverse Recovery Time	1.6	4.0	ns	$I_F=10\text{mA}$,

Typical Characteristics Curves

Fig.1- Typical Instantaneous Forward Characteristics

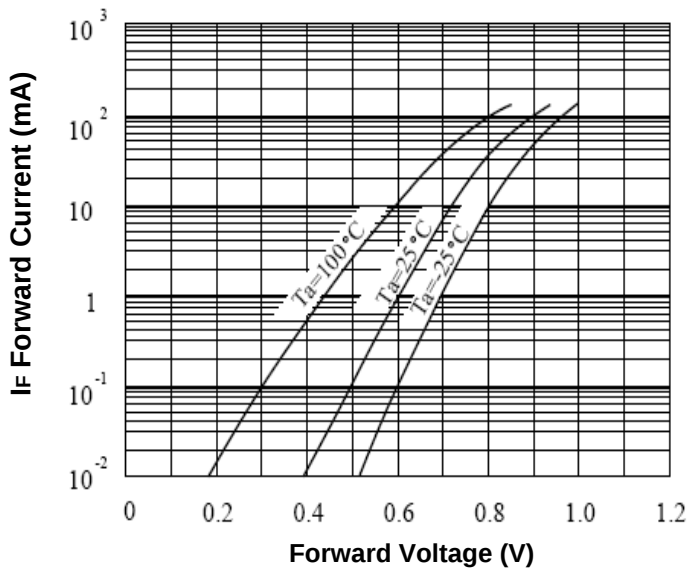
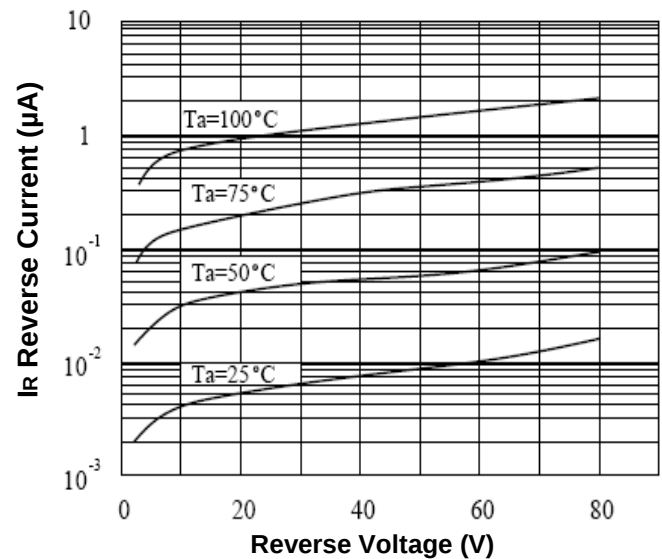


Fig.2- Typical Instantaneous Reverse Characteristics Curve



Two Terminals SMD Switching Diode

TWD4148-160WT

Fig.3- C_T – V_R

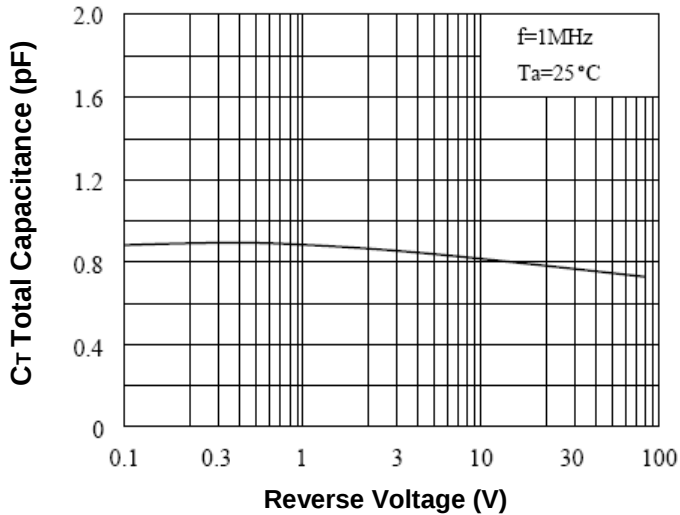


Fig.4- T_{rr} – I_F

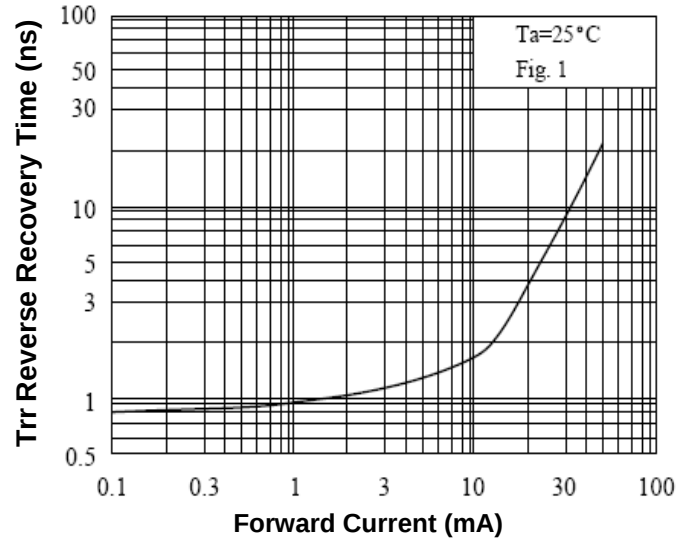
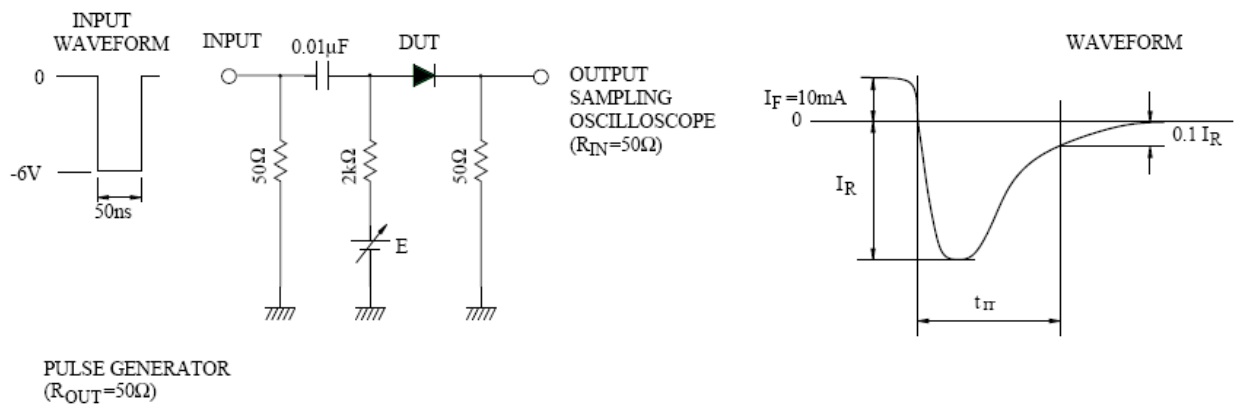
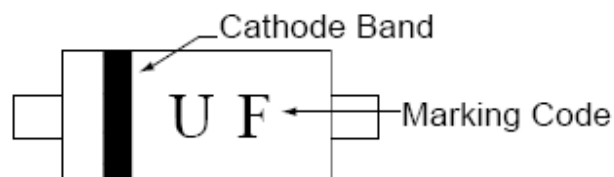


Fig. 1. REVERSE RECOVERY TIME(t_{rr}) TEST CIRCUIT



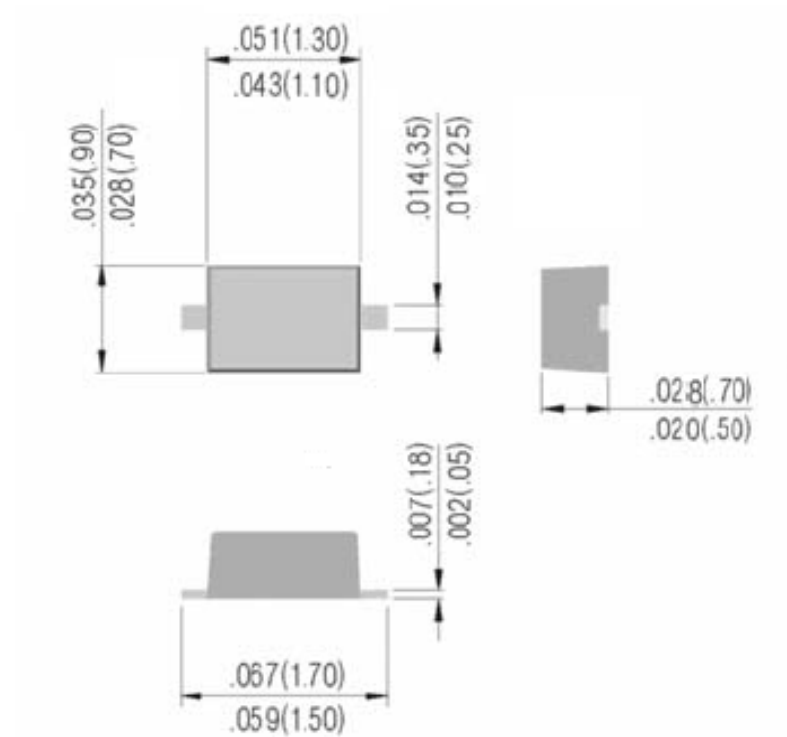
Marking Information:



Two Terminals SMD Switching Diode

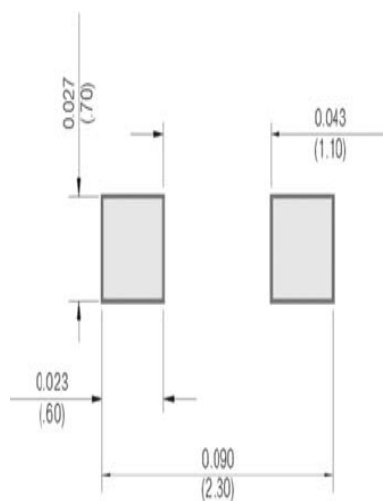
TWD4148-160WT

Dimensions in inch (mm)



SOD-523

Mounting Pad Layout in inch (mm)



Two Terminals SMD Switching Diode

TWD4148-160WT

How to contact us:

US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162
Tel: (800) TAITRON (800) 824-8766 (661) 257-6060
Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415
Email: taitron@taitroncomponents.com
Http://www.taitroncomponents.com

TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P. 42970
MEXICO
Tel: +52-55-5560-1519
Fax: +52-55-5560-2190

TAITRON COMPONENTS INCORPORATED REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL
Tel: +55-11-5574-7949
Fax: +55-11-5572-0052

TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA
Tel: +86-21-5424-9942
Fax: +86-21-5424-9931