



## DESCRIPTION

The 1N4148WT is available in SOD-523 package

## ORDERING INFORMATION

Package Type	Part Number
SOD-523	1N4148WT
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

## FEATURES

- Fast switching speed
- Ultra-small surface mount package
- For general purpose switching applications
- High conductance
- Available in SOD-523 package

## PIN DESCRIPTION





## ABSOLUTE MAXIMUM RATINGS

T<sub>A</sub>=25°C

V <sub>RM</sub> , Non-Repetitive Peak Reverse Voltage	100V	
V <sub>R</sub> , Reverse Voltage	75V	
I <sub>F(AV)</sub> , Average Rectified Forward Current	125mA	
I <sub>FM</sub> , Forward Continuous Current	250mA	
I <sub>FSM</sub> , Non-Repetitive Peak Forward Surge Current	@ t=1μs	2A
	@ t=100ms	1A
P <sub>tot</sub> , Power Dissipation	150mW	
R <sub>θJA</sub> , Thermal Resistance Junction to Ambient Air	833°C/W	
T <sub>J</sub> , Operating Temperature Range	-65°C ~+150°C	
T <sub>STG</sub> , Storage Temperature Range	-65°C ~+150°C	

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

## ELECTRICAL CHARACTERISTICS

T<sub>A</sub>=25°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =1μA	75	-	-	V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1mA	-	-	0.715	V
		I <sub>F</sub> =10mA	-	-	0.855	
		I <sub>F</sub> =50mA	-	-	1	
		I <sub>F</sub> =150mA	-	-	1.25	
Peak Reverse Current	I <sub>R</sub>	V <sub>R</sub> =75V	-	-	1	μA
		V <sub>R</sub> =20V	-	-	25	nA
		V <sub>R</sub> =75V, T <sub>J</sub> =150°C	-	-	50	μA
		V <sub>R</sub> =25V, T <sub>J</sub> =150°C	-	-	30	μA
Total Capacitance	C <sub>T</sub>	V <sub>R</sub> =0V, f=1MHz	-	-	2	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>rr</sub> =0.1 x I <sub>R</sub> , R <sub>L</sub> =100Ω	-	-	4	ns



## TYPICAL CHARACTERISTICS

Figure 1. Derating Curve

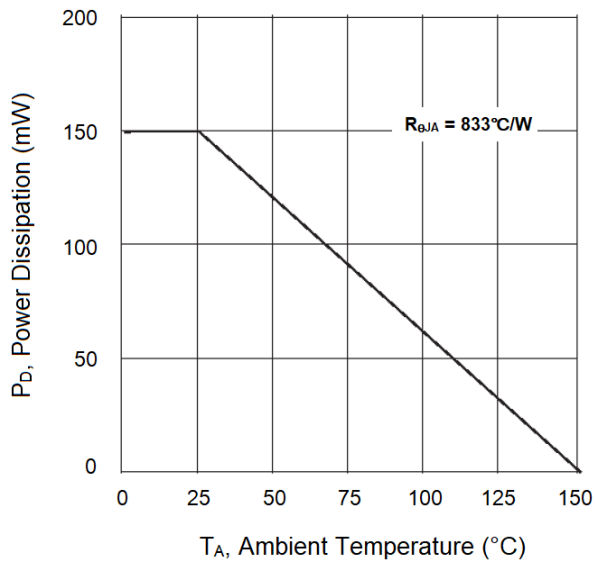


Figure 2. Forward Characteristics

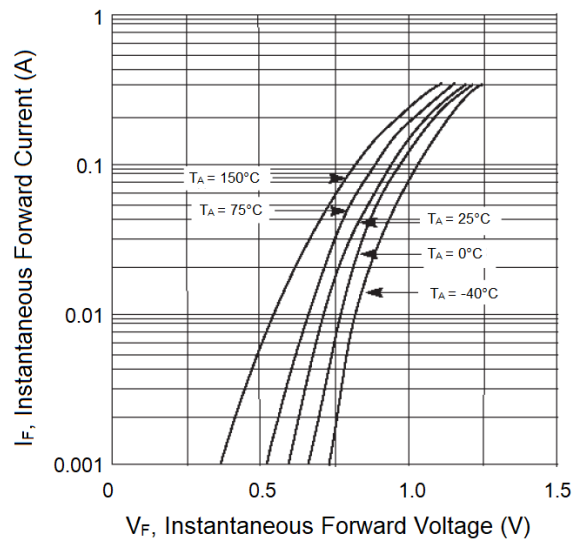


Figure 3. Typical Reverse Characteristics

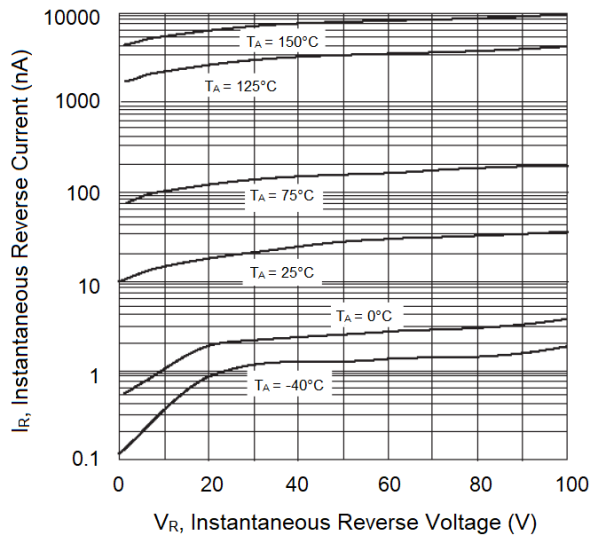
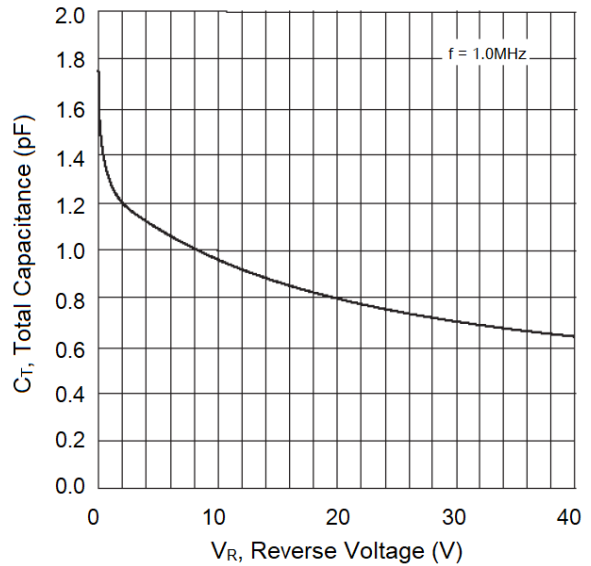


Figure 4. Typical Capacitance vs. Reverse Voltage

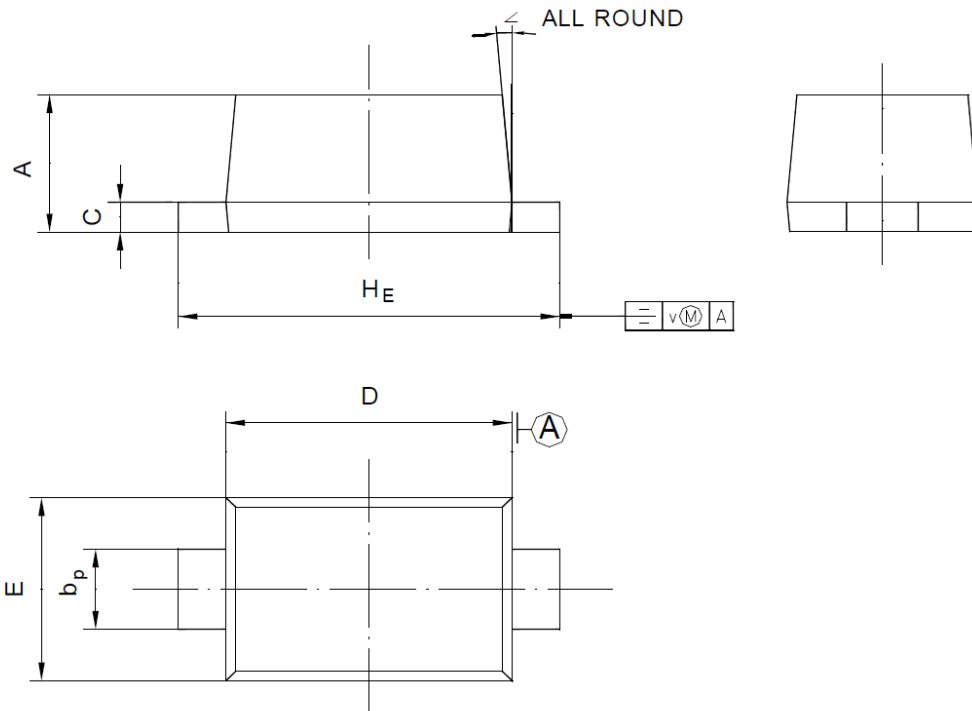




**PACKAGE INFORMATION**

Dimension in SOD-523 (Unit: mm)

Plastic surface mounted package; 2 leads



Unit		A	b <sub>p</sub>	C	D	E	H <sub>E</sub>	V	∠
mm	Max	0.70	0.4	0.135	1.25	0.85	1.7	0.1	5°
	Min	0.60	0.3	0.100	1.15	0.75	1.5		



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