

## JIEJIE MICROELECTRONICS CO., LTD.

# 1N4148WT SURFACE MOUNT SWITCHING DIODE

**Rev.1.8** 

#### **FEATURES**

- ♦ Surface Mount Package Ideally Suited for Automatic Insertion
- ♦ For Surface Mounted Applications
- ♦ RoHS compliant/Green EMC
- ♦ For General Purpose Switching Applications
- ♦ High Conductance



♦ Case: SOD-523 Molded Plastic

♦ Polarity: Color Band Denotes Cathode End



#### **ABSOLUTE MAXIMUM RATING CHARACTERISTICS**

(Rating at 25°C ambient temperature unless otherwise specified.)

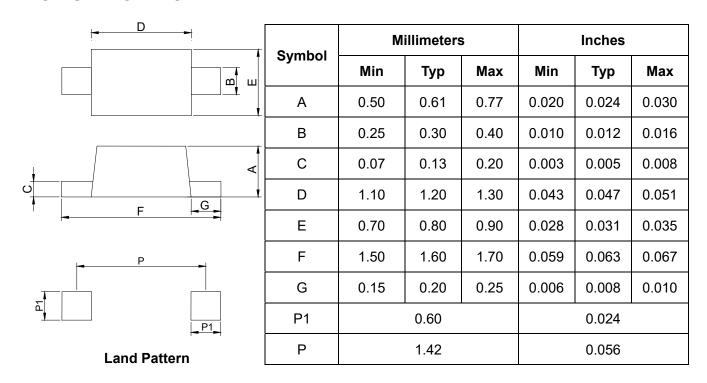
Parameter	Symbol	1N4148WT	Unit
Continuous Reverse Voltage	VR	75	V
Peak Repetitive Reverse Voltage	V <sub>RM</sub>	100	V
Average Rectified Output Current at T <sub>A</sub> =25°C	lo	150	mA
Peak Forward Current	I <sub>FM</sub>	300	mA
Non-Repetitive Forward Surge Current at t <sub>P</sub> =1s	IFSM	1	Α
Power Dissipation at T <sub>A</sub> =25℃	PD	200	mW
Thermal Resistance (Junction to Ambient)	Reja	625	°C/W
Operating Junction Temperature Range	Tj	-55 to +150	$^{\circ}$ C
Storage Temperature Range	T <sub>stg</sub>	-55 to +150	$^{\circ}$



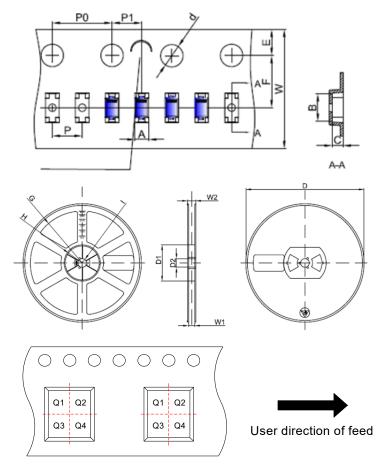
**ELECTRICAL CHARACTERISTICS**(Rating at 25°C ambient temperature unless otherwise specified.)

Campbal	Dovometer	Canditions	Value			I I w i 4
Symbol	Parameter	Conditions	Min.	Тур.	Max.	Unit
	Forward Voltage	I <sub>F</sub> =1mA	-	-	0.715	V
VF		I <sub>F</sub> =10mA	-	-	0.855	V
		I <sub>F</sub> =50mA	-	-	1.0	V
		I <sub>F</sub> =150mA	-	-	1.25	V
	Reverse Current	V <sub>R</sub> =75V,T <sub>j</sub> =25℃	-	-	1	μA
I <sub>R</sub>		V <sub>R</sub> =20V,T <sub>j</sub> =25℃	-	-	25	nA
		V <sub>R</sub> =75V,T <sub>j</sub> =150℃	-	-	50	μA
Ст	Capacitance	V <sub>R</sub> =0V,f=1MHz	-	-	2	pF
Trr	Reverse Recovery Time	I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>RR</sub> =1mA, V <sub>R</sub> =6V	-	-	4	ns

#### PACKAGE MECHANICAL DATA



#### **TAPE AND REEL SPECIFICATION-SOD-523**



Pin 1 quadrant:Q1&Q2

#### Packaging Description:

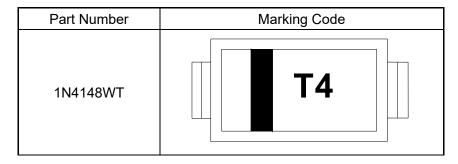
SOD-523 parts are shipped in tape. The carrier tape is made from a dissipative(carbon filled) polycarbonate resin. The cover tape is a multilayer film(heat activated adhesive in nature)primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 5,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and made of polystyrene plastic(anti-static coated).

•	Millimeters	Inches
Symbol	Тур.	Тур.
Α	0.95	0.037
В	1.92	0.076
С	0.73	0.029
d	Ф1.50	Ф0.059
E	1.75	0.069
F	3.50	0.138
P0	4.00	0.157
Р	2.00	0.079
P1	2.00	0.079
W	8.00	0.315
D	Ф178	Ф7.008
D1	54.40	2.142
D2	13.00	0.512
G	R78.00	R3.071
Н	R25.60	R1.008
1	R6.50	R0.256
W1	9.50	0.374
W2	12.30	0.484

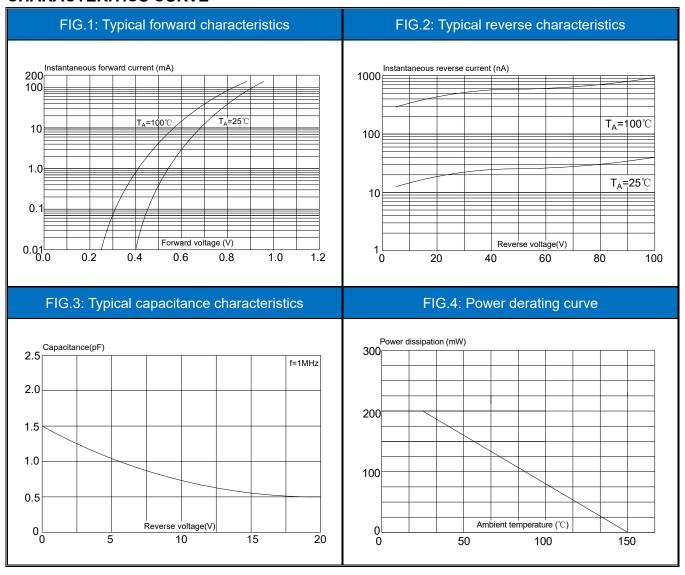
### **ORDERING INFORMATION**

PART No.	PACKAGE TYPE	QUANTITY(PCS) REEL	DESCIPTION
1N4148WT	SOD-523	5,000	7 inch reel pack

#### **MARKING CODE**



#### **CHARACTERITICS CURVE**





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