



1N4148WT-AU

SURFACE MOUNT SWITCHING DIODE

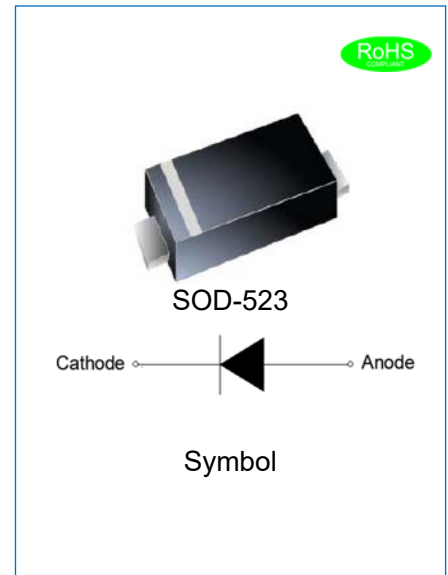
Rev.0.3

FEATURES

- ✧ Fast Switching Speed
- ✧ Surface Mount Package Ideally Suited for Automatic Insertion
- ✧ For Surface Mounted Applications
- ✧ RoHS compliant/Green EMC
- ✧ For General Purpose Switching Applications
- ✧ High Conductance
- ✧ AEC-Q101 qualified

MECHANICAL DATA

- ✧ Case: SOD-523 Molded Plastic
- ✧ Polarity: Color Band Denotes Cathode End
- ✧ Type Code: T4



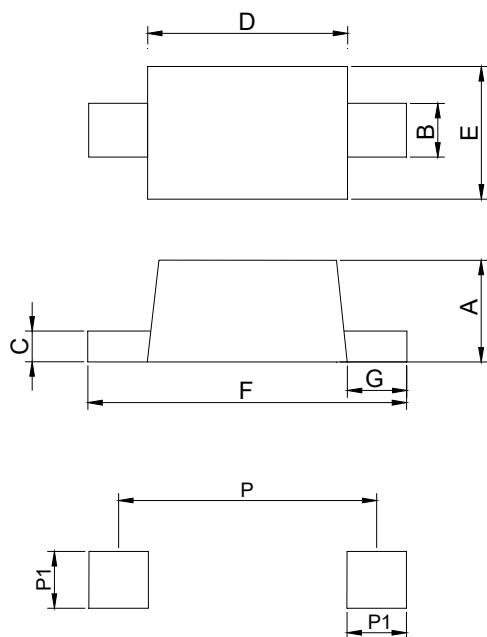
ABSOLUTE MAXIMUM RATING CHARACTERISTICS

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

Parameter	Symbol	1N4148WT-AU	Unit
Continuous Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RM}	100	V
Average Rectified Output Current at $T_A=25^\circ\text{C}$	I_O	150	mA
Peak Forward Current	I_{FM}	300	mA
Non-Repetitive Forward Surge Current at $t_P=1\text{s}$	I_{FSM}	1	A
Power Dissipation at $T_A=25^\circ\text{C}$	P_D	200	mW
Thermal Resistance (Junction to Ambient)	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

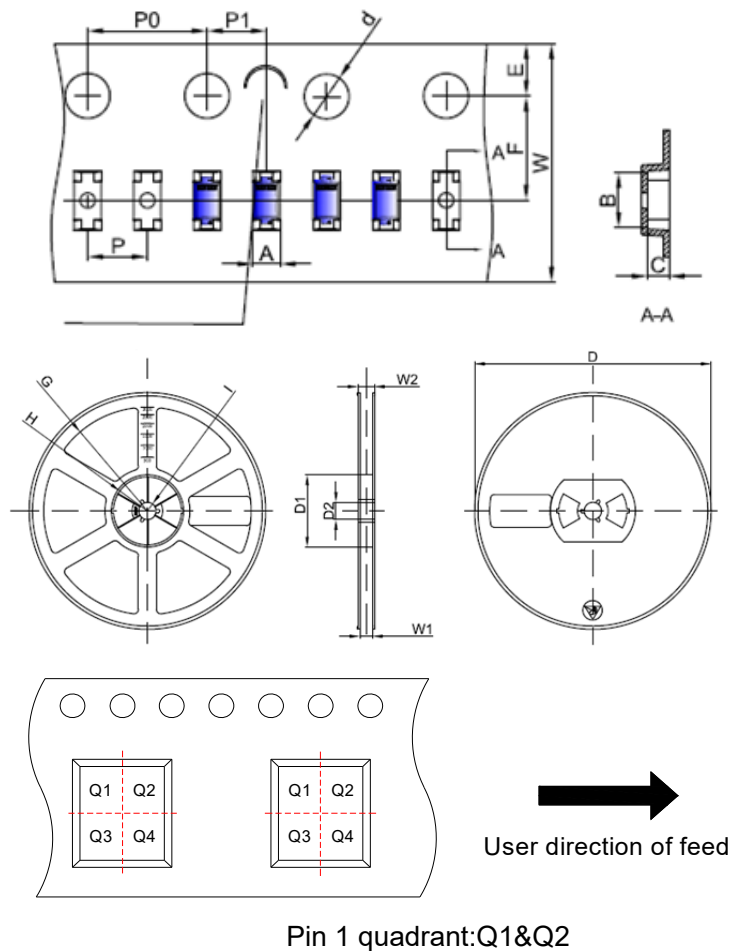
ELECTRICAL CHARACTERISTICS(Rating at 25°C ambient temperature unless otherwise specified.)

Symbol	Parameter	Conditions	Value			Unit
			Min.	Typ.	Max.	
V_F	Forward Voltage	$I_F=1\text{mA}$	-	-	0.715	V
		$I_F=10\text{mA}$	-	-	0.855	V
		$I_F=50\text{mA}$	-	-	1.0	V
		$I_F=150\text{mA}$	-	-	1.25	V
I_R	Reverse Current	$V_R=75\text{V}, T_j=25^\circ\text{C}$	-	-	1	μA
		$V_R=20\text{V}, T_j=25^\circ\text{C}$	-	-	25	nA
		$V_R=75\text{V}, T_j=150^\circ\text{C}$	-	-	50	μA
C_T	Capacitance	$V_R=0\text{V}, f=1\text{MHz}$	-	-	2	pF
T_{rr}	Reverse Recovery Time	$I_F=I_R=10\text{mA}$ $I_{RR}=1\text{mA}, V_R=6\text{V}$	-	-	4	ns

PACKAGE MECHANICAL DATA**Land Pattern**

Symbol	Millimeters			Inches		
	Min	Typ	Max	Min	Typ	Max
A	0.50	0.61	0.77	0.020	0.024	0.030
B	0.25	0.30	0.40	0.010	0.012	0.016
C	0.07	0.13	0.20	0.003	0.005	0.008
D	1.10	1.20	1.30	0.043	0.047	0.051
E	0.70	0.80	0.90	0.028	0.031	0.035
F	1.50	1.60	1.70	0.059	0.063	0.067
G	0.15	0.20	0.25	0.006	0.008	0.010
P1	0.60			0.024		
P	1.42			0.056		

TAPE AND REEL SPECIFICATION-SOD-523



Packaging Description:

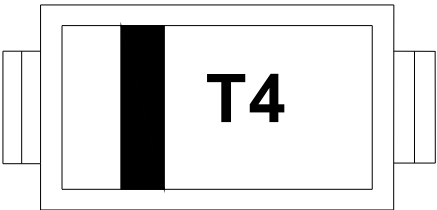
SOD-523 parts are shipped in tape. The carrier tape is made from a dissipative(carbon filled) polycarbonate resin. The cover tape is a multilayer film(heat activated adhesive in nature)primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in 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).

Symbol	Millimeters	Inches
	Typ.	Typ.
A	0.95	0.037
B	1.92	0.076
C	0.73	0.029
d	Φ1.50	Φ0.059
E	1.75	0.069
F	3.50	0.138
P0	4.00	0.157
P	2.00	0.079
P1	2.00	0.079
W	8.00	0.315
D	Φ178	Φ7.008
D1	54.40	2.142
D2	13.00	0.512
G	R78.00	R3.071
H	R25.60	R1.008
I	R6.50	R0.256
W1	9.50	0.374
W2	12.30	0.484

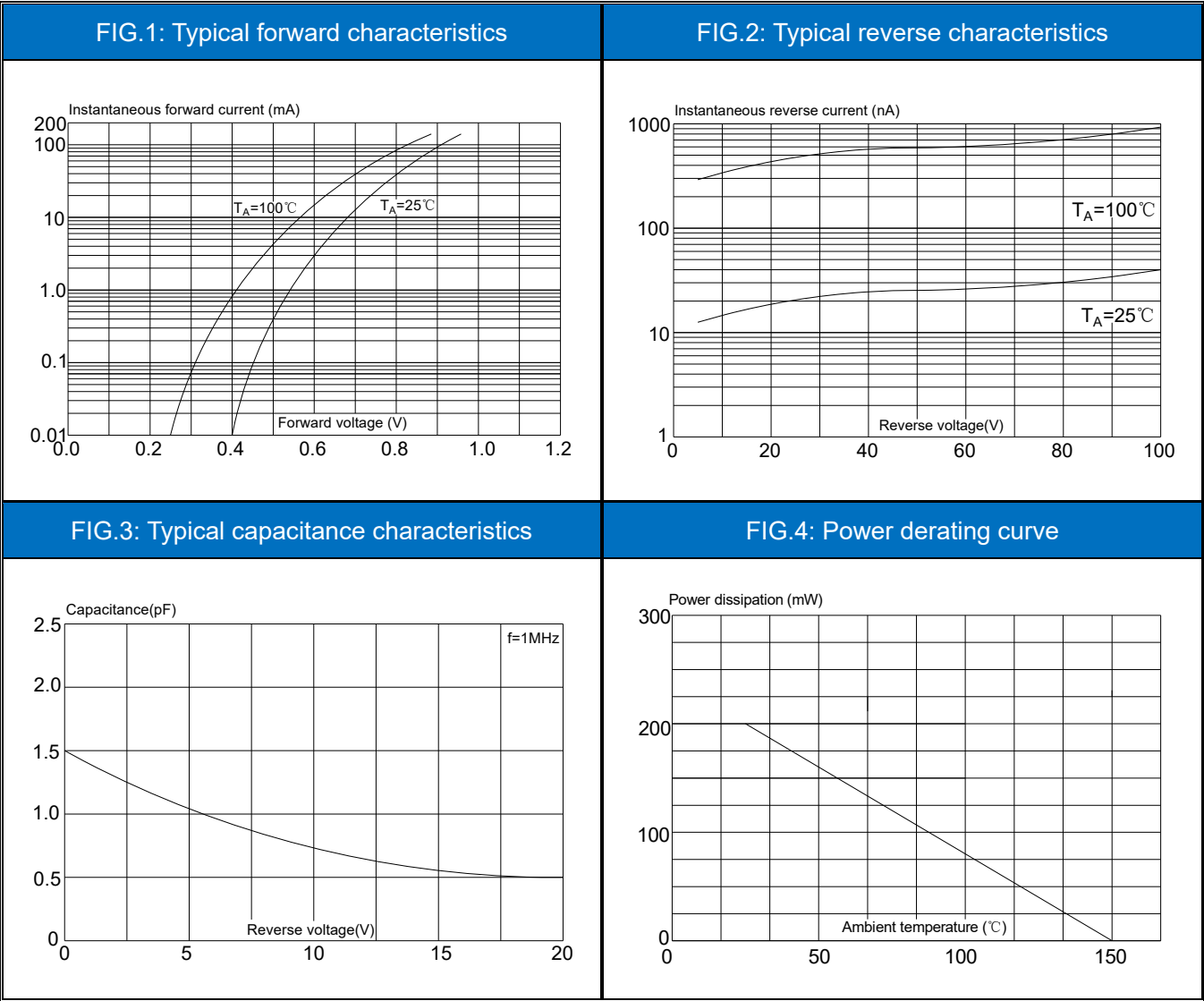
ORDERING INFORMATION

PART No.	PACKAGE TYPE	QUANTITY(PCS) REEL	DESCRIPTION
1N4148WT-AU	SOD-523	8,000	7 inch reel pack

MARKING CODE

Part Number	Marking Code
1N4148WT-AU	

CHARACTERITICS CURVE



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