



## 1N4148WS-AU SURFACE MOUNT SWITCHING DIODE

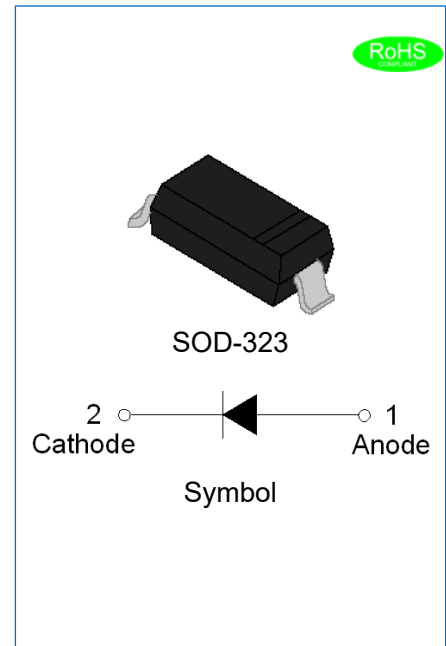
Rev.0.2

### 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-323, Plastic
- ✧ Polarity: Cathode Band
- ✧ Weight: 0.004grams(approx.)
- ✧ Quantity Per Reel:3,000pcs
- ✧ Type Code: T4



### ABSOLUTE MAXIMUM RATING CHARACTERISTICS

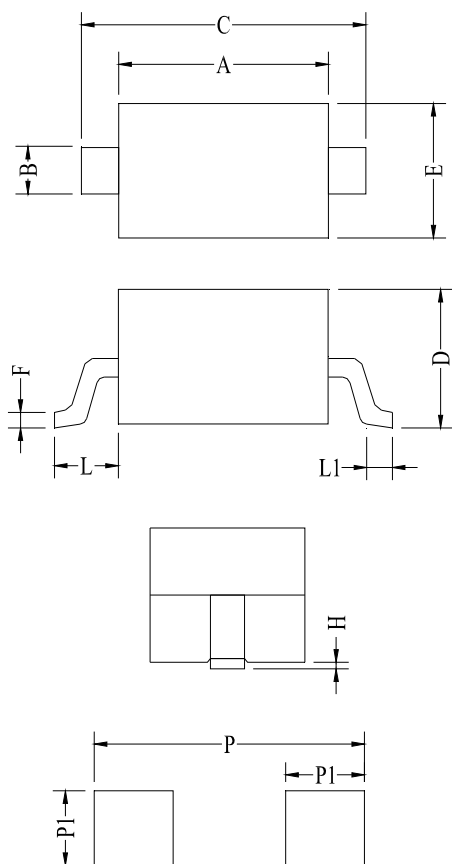
(Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	1N4148WS-AU	Unit
Continuous Reverse Voltage	$V_R$	75	V
Peak Repetitive Reverse Voltage	$V_{RM}$	100	V
Average Rectified Output Current	$I_O$	150	mA
Forward Continuous Current	$I_{FM}$	300	mA
Non-repetitive Peak Forward Surge Current ( $t_P=1\mu s$ )	$I_{FSM}$	2	A
Power Dissipation at $T_A=25^\circ C$	$P_D$	200	mW
Thermal Resistance (Junction to Ambient)	$R_{\theta JA}$	625	$^\circ C/W$
Operating Junction Temperature Range	$T_j$	-55 to +150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 to +150	$^\circ C$

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

Symbol	Parameter	Conditions	Value			Unit
			Min.	Typ.	Max.	
$V_{(BR)R}$	Breakdown Voltage	$I_R=100\mu A$	100	-	-	V
		$I_R=5\mu A$	75	-	-	V
$V_F$	Forward Voltage	$I_F=1mA$	-	-	0.715	V
		$I_F=10mA$	-	-	0.855	V
		$I_F=50mA$	-	-	1	V
		$I_F=150mA$	-	-	1.25	V
$I_R$	Reverse Current	$V_R=20V, T_j=25^\circ C$	-	-	25	nA
		$V_R=20V, T_j=150^\circ C$	-	-	50	$\mu A$
		$V_R=75V, T_j=25^\circ C$	-	-	1	$\mu A$
		$V_R=75V, T_j=150^\circ C$	-	-	50	$\mu A$
$C_T$	Capacitance	$V_R=0V, f=1MHz$	-	4	-	pF
$T_{rr}$	Reverse Recovery Time	$I_F=I_R=10mA$ $I_{RR}=1mA, V_R=6V$	-	-	4	ns

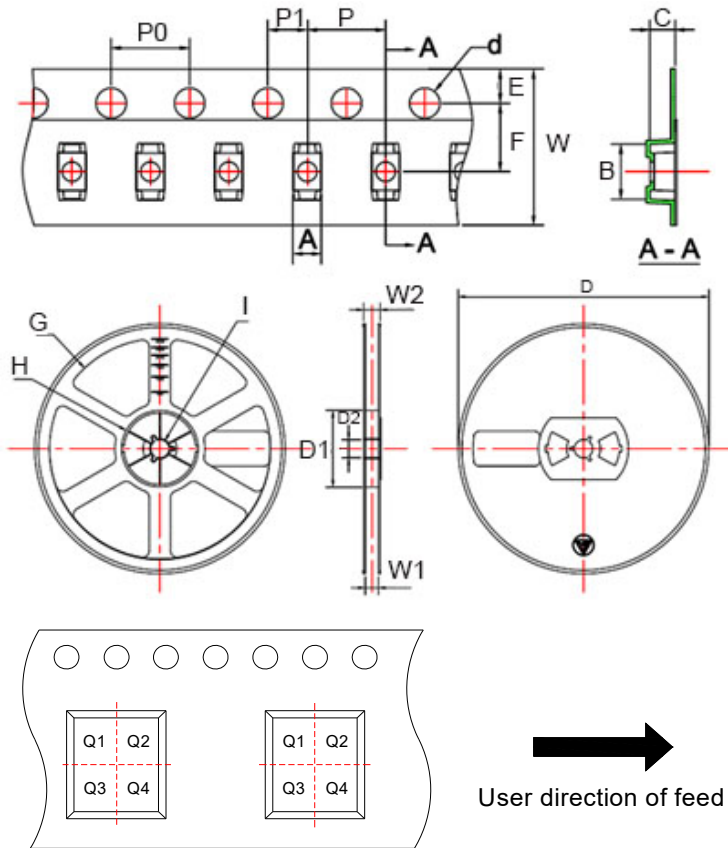
PACKAGE MECHANICAL DATA



Land Pattern

Symbol	Millimeters			Inches		
	Min	Typ	Max	Min	Typ	Max
A	1.60	1.70	1.80	0.063	0.067	0.071
B	0.25	0.32	0.40	0.010	0.013	0.016
C	2.30	2.60	2.80	0.091	0.102	0.110
D	0.80	0.95	1.10	0.031	0.037	0.043
E	1.20	1.30	1.40	0.047	0.051	0.055
F	0.08	0.13	0.18	0.003	0.005	0.007
L	0.475REF			0.019REF		
L1	0.25	0.33	0.40	0.010	0.013	0.016
H	0.00	0.06	0.14	0.000	0.002	0.006
P	3.00			0.118		
P1	0.80			0.031		

TAPE AND REEL INFORMATION-SOD-323



Pin 1 quadrant:Q1&Q2

Packaging description:

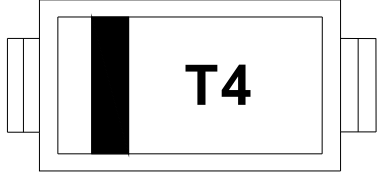
SOD-323 parts are shipped in tape. The carrier tape is made from a dissipative(carbon filled) polycarbonate resin. The cover tape is a multilayer film(heat activated adhesive in nature)primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. The reels are blue in color and made of recyclable plastic.

Symbol	Millimeters	Inches
	Typ	Typ
A	1.46	0.057
B	2.90	0.114
C	1.25	0.049
d	∅1.50	∅0.059
E	1.75	0.069
F	3.50	0.138
P0	4.00	0.157
P	4.00	0.157
P1	2.00	0.079
W	8.00	0.315
D	∅178.0	∅7.008
D1	54.40	2.142
D2	13.00	0.512
G	R78.0	R3.071
H	R25.60	R1.008
I	R6.50	R0.256
W1	9.50	0.374
W2	12.30	0.484

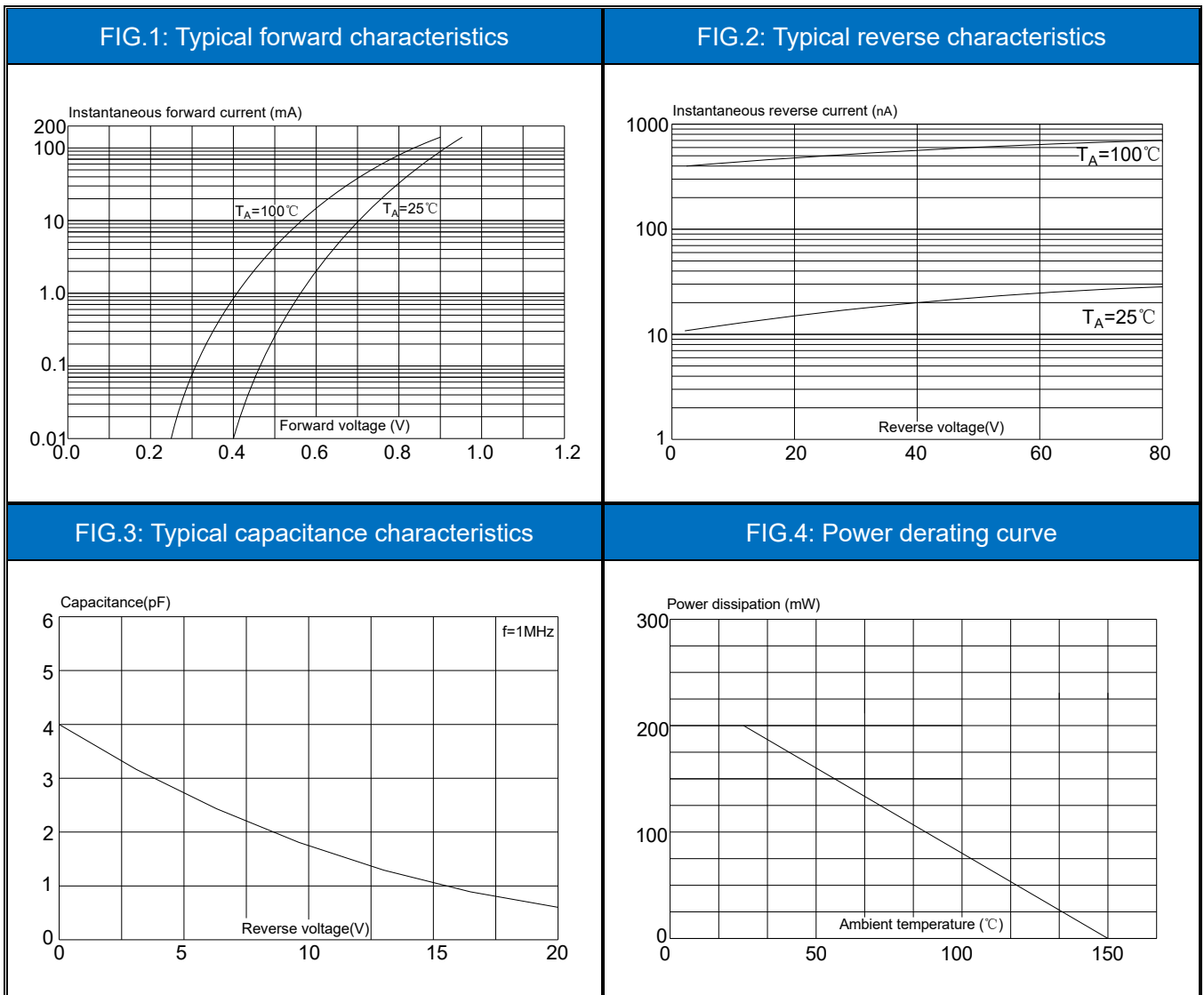
ORDERING INFORMATION

OUTLINE	PACKAGE TYPE	QUANTITY REEL	DESCRIPTION
TAPING	SOD-323	3,000	7 inch reel pack

MARKING CODE

Part Number	Marking Code
1N4148WS-AU	

CHARACTERISTICS CURVE




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