

1N4148WT

SURFACE MOUNT FAST SWITCHING DIODE

Features

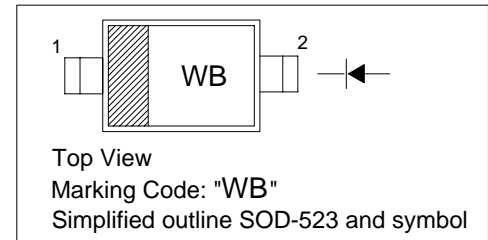
- Fast Switching Speed.
- Ultra-Small Surface Mount Package.
- For General Purpose Switching Applications
- High Conductance

Mechanical Data

- Case: SOD-523, Plastic
- Moisture Sensitivity : Level 1 per J-STD-020A
- Polarity : Cathode Band
- Terminals: Finish – Matte Tin
Solderable per MIL-STD-202, Method 208

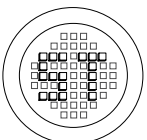
PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings (T_j = 25°)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Reverse Voltage	V _R	75	V
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	250	mA
Average Rectified Output Current	I _O	125	mA
Non-Repetitive Peak Forward Surge Current @ t=1.0μs	I _{FSM}	2.0	A
@ t=100ns		1.0	
Power Dissipation	P _{tot}	150	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	833	? /W
Operating Temperature Range	T _J	-65 to +150	°C
Storage Temperature	T _s	-65 to +150	°C



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РАДИОТЕХ-ТРЕЙД

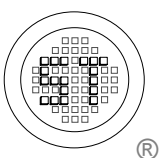
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Characteristics at $T_j = 25\text{ }^\circ\text{C}$

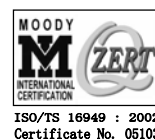
Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage ¹⁾	$I_R = 1.0\mu\text{A}$	$V_{(BR)R}$	75	-	-	V
Forward Voltage	$I_F = 1.0\text{mA}$	V_F	-	-	0.715	V
	$I_F = 10\text{mA}$		-	-	0.855	
	$I_F = 50\text{mA}$		-	-	1.0	
	$I_F = 150\text{mA}$		-	-	1.25	
Peak Reverse Current ¹⁾	$V_R = 75\text{V}$	I_R	-	-	1.0	μA
	$V_R = 75\text{V}, T_J = 150\text{ }^\circ\text{C}$		-	-	50	μA
	$V_R = 25\text{V}, T_J = 150\text{ }^\circ\text{C}$		-	-	30	μA
	$V_R = 20\text{V}$		-	-	25	nA
Total Capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$	C_T	-	-	2.0	pF
Reverse Recovery Time	$I_{rr} = 0.1 \times I_R, I_F = I_R = 10\text{mA}, R_L = 100\ \Omega$	t_{rr}	-	-	4.0	ns

1) Short duration pulse test used to minimize self-heating effect.



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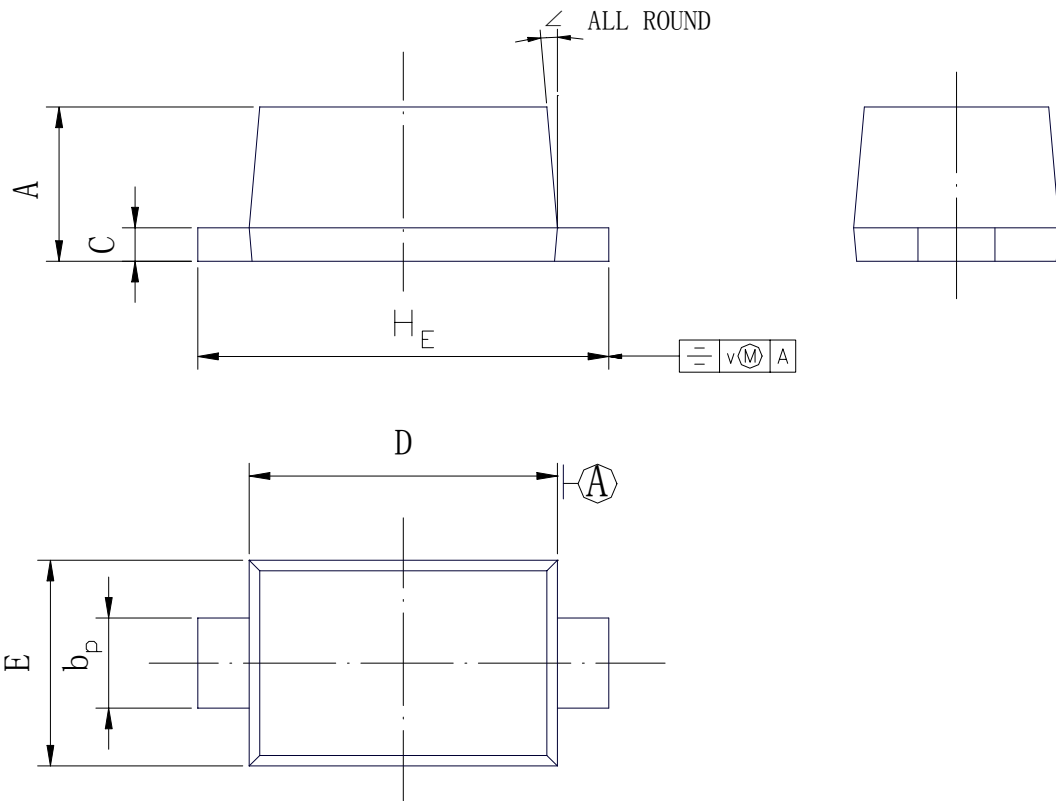
Dated : 11/10/2004

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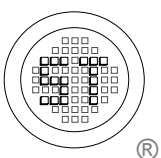
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523

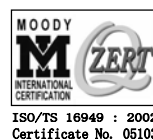


UNIT	A	b _P	C	D	E	H _E	v	∠
mm	0.70 0.60	0.4 0.3	0.135 0.127	1.25 1.15	0.85 0.75	1.65 1.55	0.1	5°



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001
Certificate No. 7116



ISO 9001 : 2000
Certificate No. 558-109-042-24

Dated : 11/10/2004