

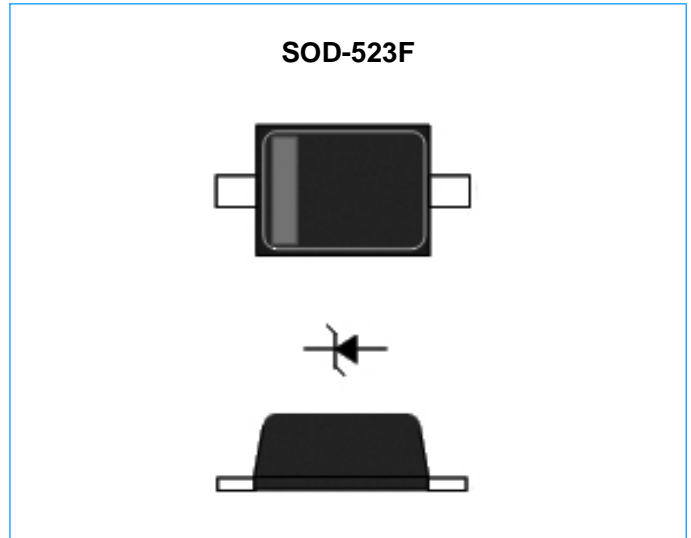
Fast Switching Diode

1N4148WT

SOD-523F

Features

- ⌌ Fast switching devices
- ⌌ SOD-523F Micro SMD package
- ⌌ RoHS compliant / Green EMC
- ⌌ Matte Tin (Sn) Lead finish
- ⌌ Cathode Band / Device marking
- ⌌ Surface Mount Package Ideally Suited for Automatic Insertion
- ⌌ For General Purpose Switching Applications
- ⌌ High Conductance



Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Value	Units
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	75	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_o	150	mA
Non-Repetitive Peak Forward Surge Current (@t=8.3ms)	I_{FSM}	2.0	A
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 to +150	°C

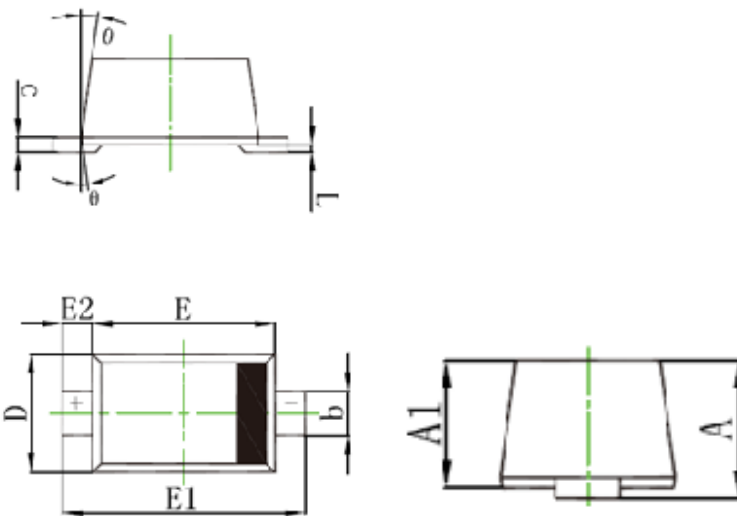
Fast Switching Diode

1N4148WT
SOD-523F

Electrical Characteristics (Ta = 25°C)

Parameter	Symbol	Conditions	Min.	Max.	Units
Forward Voltage	V_F	$I_F = 1\text{mA}$	--	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
Reverse Current	I_R	$V_R = 20\text{V}$ (25°C)	--	0.025	μA
		$V_R = 75\text{V}$ (25°C)	--	1.0	μA
		$V_R = 75\text{V}$ (150°C)	--	50.0	μA
Capacitance	C_T	$V_R = 0\text{V}$, $f = 1\text{MHz}$	--	2	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10\text{mA}$, $I_{RR} = 1\text{mA}$, $R_L = 100\Omega$	--	4	ns

SOD-523F Package Dimensions



SOD-523F Package Outline

Symbol	Dimensions in mm	
	Min.	Max.
A	0.51	0.77
A1	0.50	0.70
b	0.25	0.35
c	0.08	0.15
D	0.75	0.85
E	1.10	1.30
E1	1.50	1.70
E2	0.20 REF.	
L	0.01	0.07
θ	7° REF.	

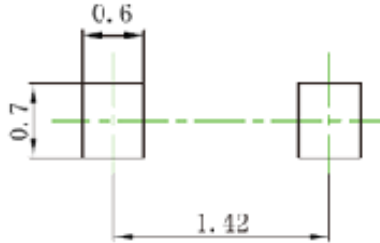
Notes:

1. Halogen free. EMC.
2. Pb free solder.
3. Lead thickness includes solder plating.
4. Lead frame: Cu.
5. Other Tolerance: ±0.05.
6. Dimensions are exclusive of Burrs, Mold Flash and Tie Bar extrusions.

Fast Switching Diode

1N4148WT
SOD-523F

SOD-523F Package Dimensions (Continue)



SOD-523F Pattern Recommendation

Ordering Information

Part Number	Package	Shipping
1N4148WT	SOD-523F	Tape & Reel 8000pcs /7" Reel