

1N4148W

Silicon Epitaxial Planar Switching Diode

Features

- SOD-123 package
- Fast switching
- These diodes are also available in other case style including the DO-35 case with the type designation 1N4148, the MiniMELF case with the type designation LL4148 and the MicroMELF case with the type designation MCL4148.

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Top View
Marking Code: "W1"
Simplified outline SOD-123 and symbol

Absolute Maximum Ratings (T_a = 25°C)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V _{RM}	100	V
Reverse Voltage	V _R	75	V
Average Rectified Forward Current	I _{F(AV)}	150	mA
Non-repetitive Peak Forward Surge Current	I _{FSM}	0.5	A
at t = 1 s		1	
at t = 1 ms		4	
at t = 1 μs			
Power Dissipation	P _{tot}	400	mW
Thermal Resistance from Junction to Ambient Air	R _{θJA}	312	°C/W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 65 to + 150	°C

Characteristics at T_a = 25°C

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I _R = 1 μA	V _{(BR)R}	75	-	V
Forward Voltage at I _F = 1 mA at I _F = 10 mA at I _F = 50 mA at I _F = 150 mA	V _F	- - - -	0.715 0.855 1 1.25	V
Peak Reverse Current at V _R = 75 V at V _R = 20 V at V _R = 75 V, T _J = 150°C at V _R = 25 V, T _J = 150°C	I _R	- - - -	1 25 50 30	μA nA μA μA
Total Capacitance at V _R = 0 V, f = 1 MHz	C _T	-	2	pF
Reverse Recovery Time at I _F = 10 mA, I _{rr} = 1 mA, V _R = 6 V, R _L = 100 Ω	t _{rr}	-	4	ns

