



Switching Diodes

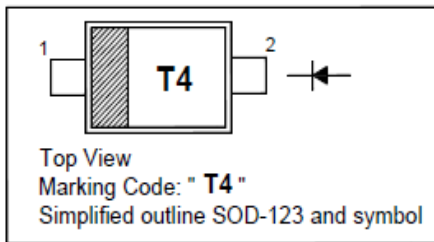
Reverse Voltage - 100 Volts
Forward Current - 150 Milliampere

FEATURES

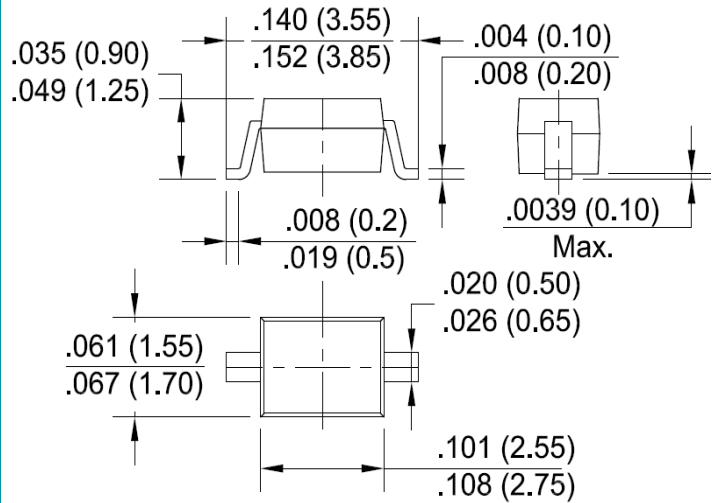
- SOD123 package
- Fast switching
- These diodes are also available in other case styles including the DO-35 case with the type designation IN4148, the MiniMELF case with the type designation LL4148 and the MicroMELF case with the type designation MCL4148.

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



SOD-123



Package Outline Dimensions in Inches (Millimeters)

Absolute Maximum Ratings (T_a=25°C)

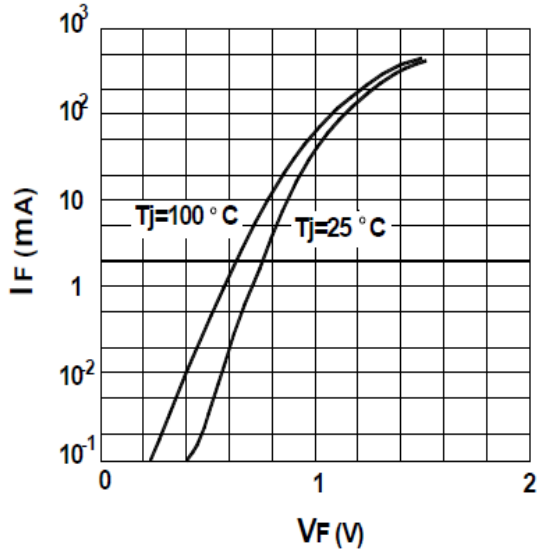
Parameter	Symbol	1N4148W	Unit
Peak Reverse Voltage	V _{RM}	100	V
Reverse Voltage	V _R	75	V
Average Rectified Forward Current	I _{F(AV)}	150	mA
Non-repetitive Peak Forward Surge Current @t=1s @t=1ms @t=1us	I _{FSM}	0.5	A
		1	
		4	
Power Dissipation	P _{tot}	400	mW
Thermal Resistance from Junction to Ambient Air	R _{θJA}	450	°C/W
Junction Temperature	T _J	-55 to +150	°C
Storage Temperature	T _{STG}	-55 to +150	°C
Max. Forward Voltage @ I _F = 1 mA @ I _F = 10 mA @ I _F = 50 mA @ I _F = 150 mA	V _F	0.715	V
		0.855	
		1	
		1.25	
Max. Peak Reverse Current @V _R = 75 V @V _R = 20 V @V _R = 75 V, T _J = 150°C @V _R = 25 V, T _J = 150°C	I _R	5	μA
		25	nA
		50	μA
		30	μA
Total Capacitance @V _R = 0 V, f = 1 MHz	C _T	2	pF
Reverse Recovery Time @I _{rr} = 0.1 X I _R , I _F = I _R = 10 mA, R _L = 100 Ω	t _{rr}	4	ns

RATING AND CHARACTERISTIC CURVES

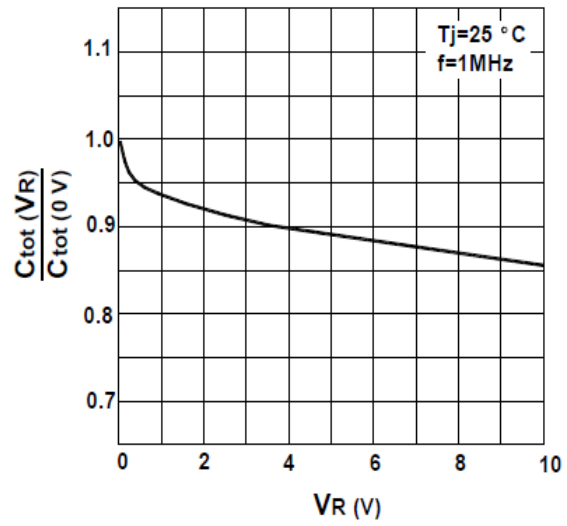
1N4148W



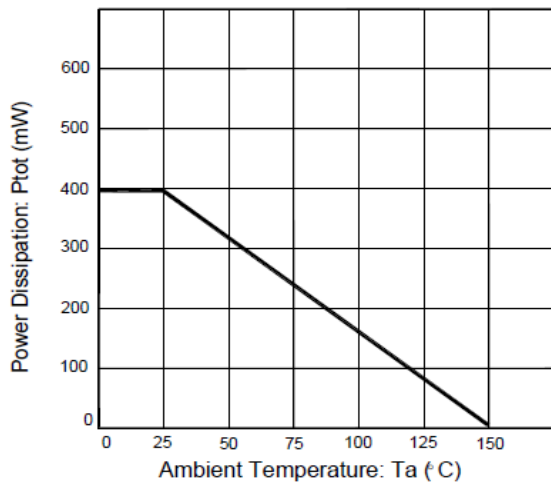
Forward characteristics



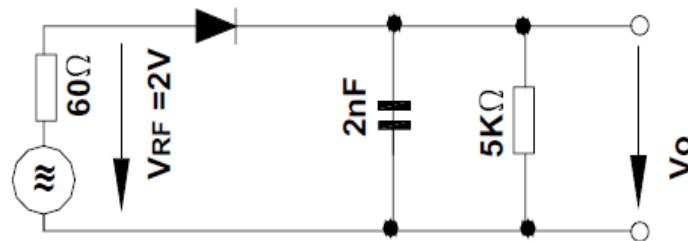
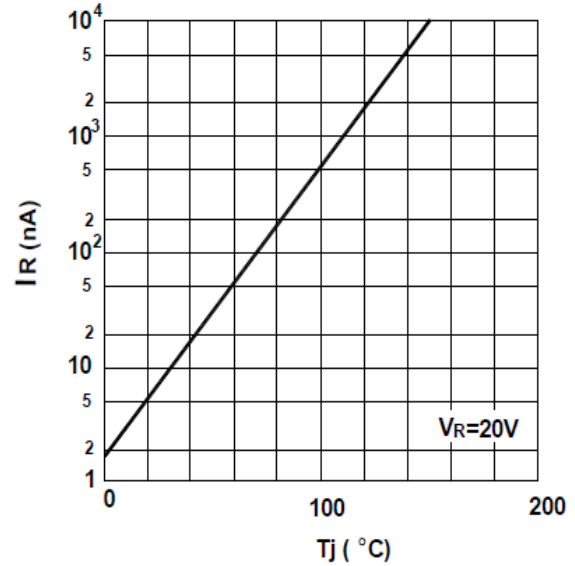
Reverse capacitance vs. reverse voltage



Power Dissipation vs Ambient Temperature



Leakage current vs. junction temperature



The curve above is for reference only.

1N4148W-7-99-00/01-BC1201

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