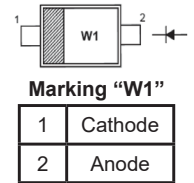


Small Signal Diode



Description

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.

Features

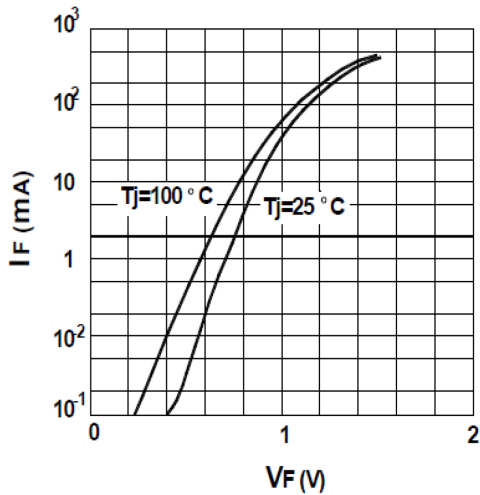
- SOD 123 package
- Fast switching
- Reverse voltage: 100 Volts
- Forward current: 150mA

Absolute Maximum Ratings (TA = 25°C)

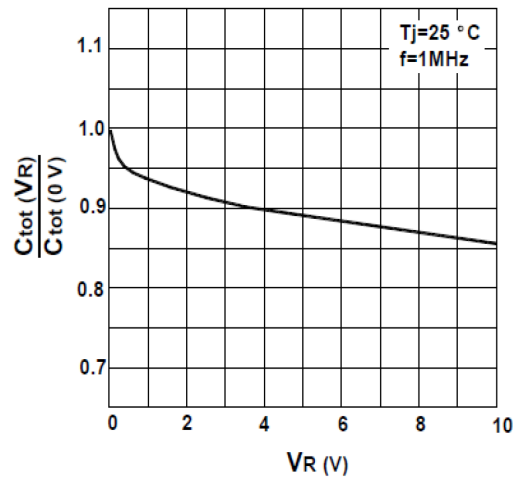
Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V _{RM}	100	V
Reverse Voltage	V _R	75	
Reverse Breakdown Voltage @I _R =1μA	V _{(BR)R}	75	
Average Rectified Forward Current	I _{F(AV)}	150	mA
Non-repetitive Peak Forward Surge Current @t=1s @t=1ms @t=1μs	I _{FSM}	0.5	A
		1	
		4	
Power Dissipation	P _{tot}	400	mW
Thermal Resistance from Junction to Ambient Air	R _{θJA}	312	°C/W
Junction Temperature	T _J	-55 to +150	°C
Storage Temperature	T _{STG}	-55 to +150	
Max. Forward Voltage @ I _F = 1mA @ I _F = 10mA @ I _F = 50 mA @ I _F = 150 mA	V _F	0.715 0.855 1 1.25	V
Max. Peak Reverse Current @V _R = 75V @V _R = 20V @V _R = 75V, T _J = 150°C @V _R = 25V, T _J = 150°C	I _R	1	μA
		25	nA
		50	μA
		30	μA
Total Capacitance @V _R = 0V, f = 1 MHz	C _T	2	pF
Reverse Recovery Time @I _{rr} = 0.1 X I _R , I _F = I _R = 10mA, R _L = 100Ω	t _{rr}	4	ns

Rating and Characteristic Curves

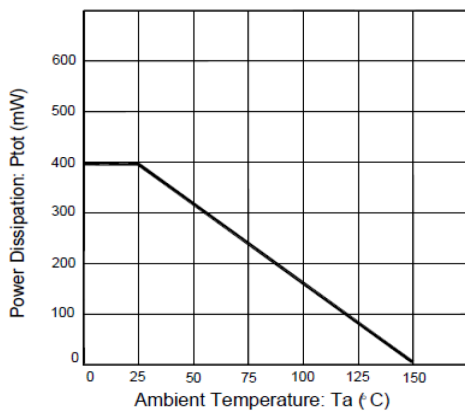
Forward characteristics



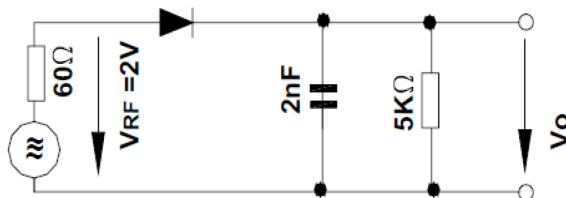
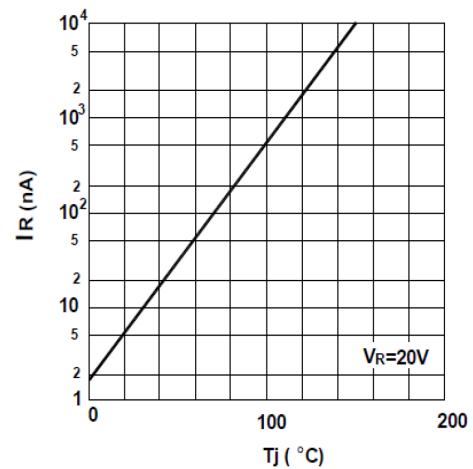
Reverse capacitance vs. reverse voltage



Power Dissipation vs Ambient Temperature

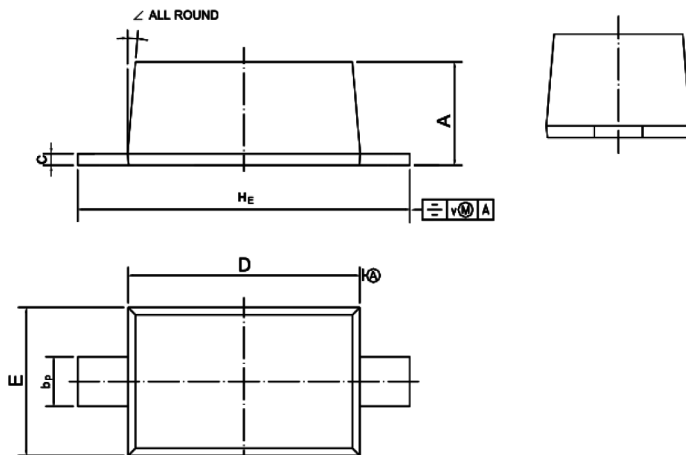


Leakage current vs. junction temperature



Diagram

SOD-123



Unit	A	bp	C	D	E	HE	v	∠
mm	1.15	0.6	0.135	2.7	1.65	3.85	0.2	5°
	1.05	0.5	0.127	2.6	1.55	3.55		

Part Number Table

Description	Part Number
Small Signal Diode, Single, 100V, 150mA, 1V, 4ns, 2A	1N4148W

Dimensions : Millimetres

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.