



## Silicon Epitaxial Planar Small Signal Diode

**Reverse Voltage - 75 Volts**  
**Forward Current - 150 Milliampere**

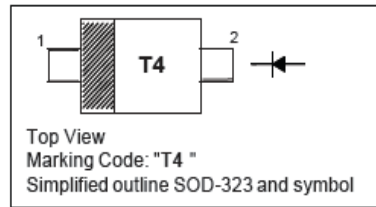
### FEATURES

- SOD-323 package
- Fast switching
- These diodes are also available in other case styles 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.

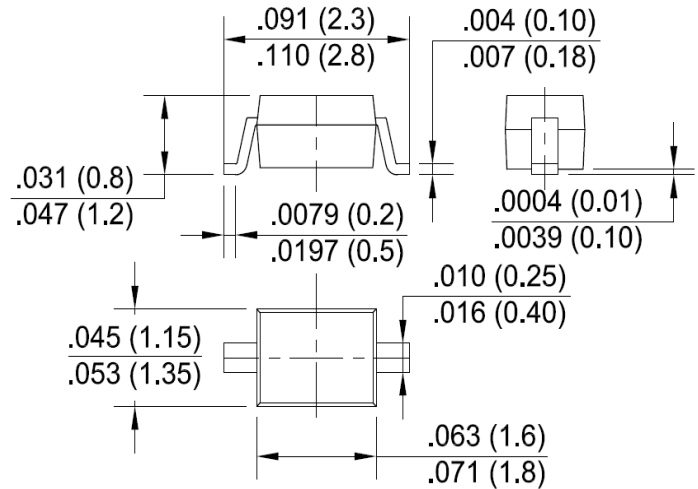
Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

#### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### SOD-323



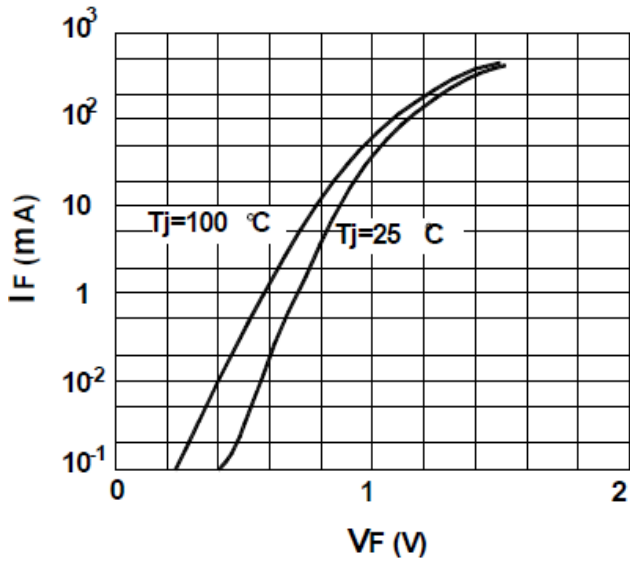
Package Outline Dimensions in Inches (Millimeters)

### Absolute Maximum Ratings ( $T_a=25^\circ\text{C}$ )

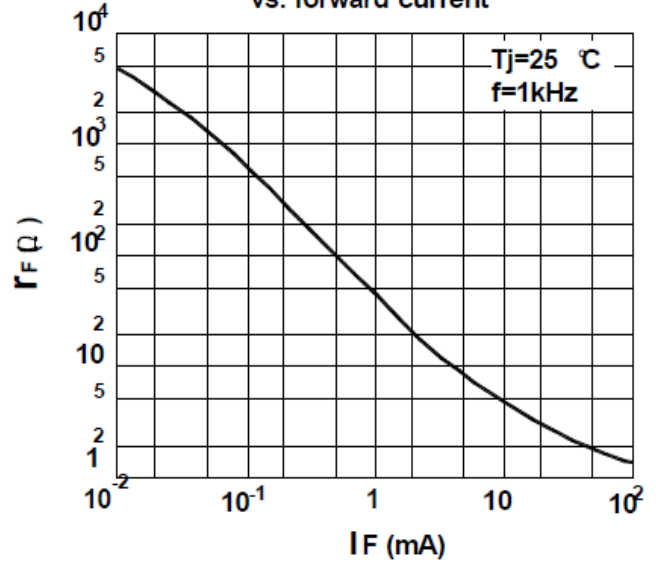
Parameter	Symbol	1N4148WS	Unit
Peak Reverse Voltage	$V_{RM}$	100	V
Reverse Voltage	$V_R$	75	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Surge Forward Current ( $t < 1$ s, $T_j = 25$ OC)	$I_{FSM}$	350	mA
Power Dissipation	$P_{tot}$	200	mW
Thermal Resistance from Junction to Ambient Air	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-65 to +150	$^\circ\text{C}$
Max. Forward Voltage	$V_F$	@ $I_F = 1$ mA	0.715
		@ $I_F = 10$ mA	0.855
		@ $I_F = 50$ mA	1
		@ $I_F = 150$ mA	1.25
Max. Peak Reverse Current	$I_R$	@ $V_R = 75$ V	1
		@ $V_R = 20$ V	25
		@ $V_R = 75$ V, $T_j = 150^\circ\text{C}$	50
		@ $V_R = 25$ V, $T_j = 150^\circ\text{C}$	30
Total Capacitance @ $V_R = 0$ V, $f = 1$ MHz	$C_T$	2	pF
Reverse Recovery Time @ $I_{rr} = 0.1 \times I_R$ , $I_F = I_R = 10$ mA, $R_L = 100 \Omega$	$t_{rr}$	4	ns



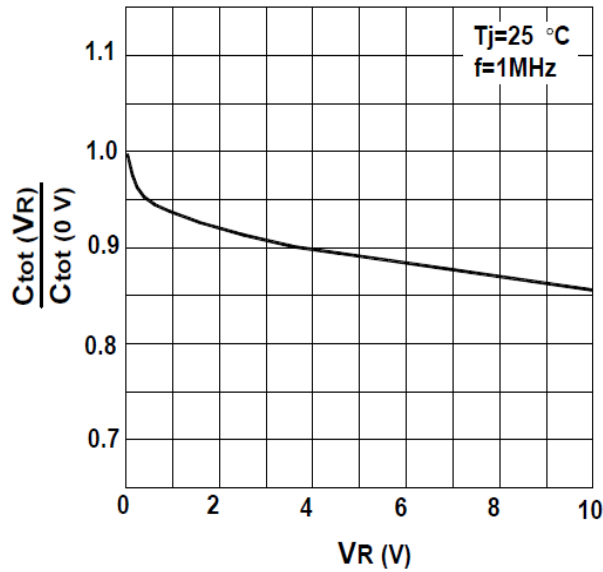
Forward characteristics



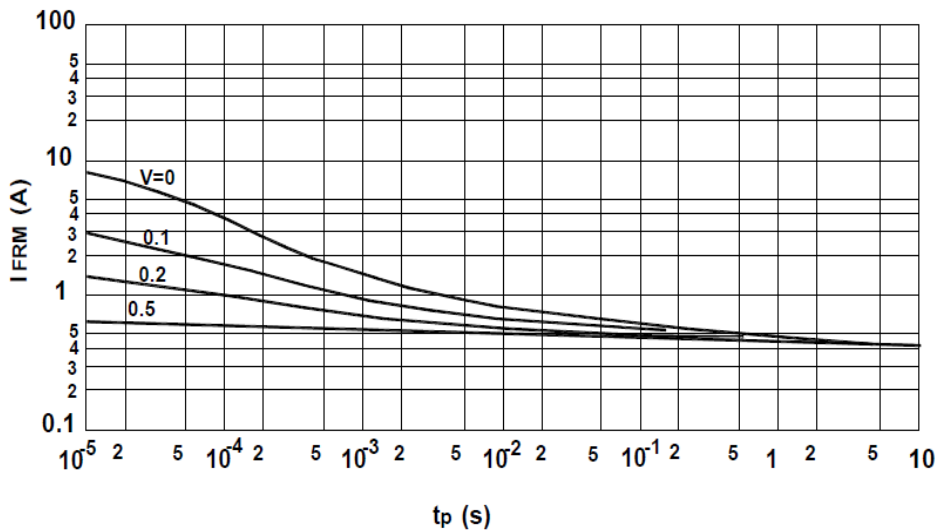
Dynamic forward resistance vs. forward current



Reverse capacitance vs. reverse voltage



Ammissible repetitive peak forward current vs. pulse duration



The curve above is for reference only.



### Disclaimer

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