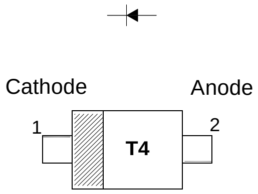
1N4148WS Silicon Epitaxial Planar Switching Diode



SOD-323

Features

- SOD-323 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.

MARKING: T4

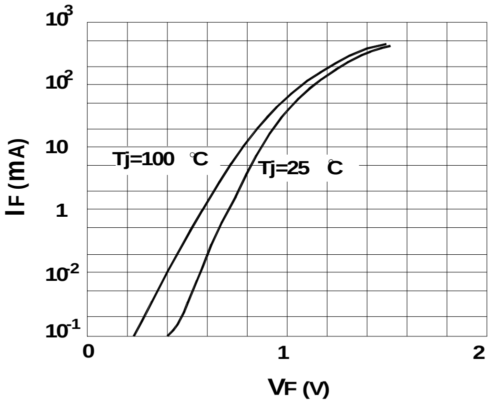
Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	100	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Surge Forward Current (t < 1 s, T_j = 25 °C)	I_{FSM}	350	mA
Power Dissipation	P_{tot}	200	mW
Thermal Resistance from Junction to Ambient Air	$R_{\theta JA}$	625	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 65 to + 150	°C

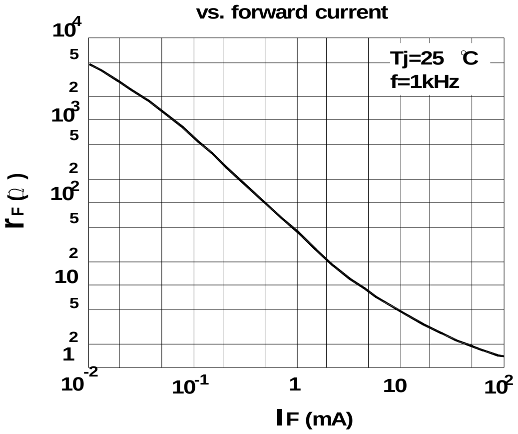
Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
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_{rr} = 0.1 X I_R, I_F = I_R = 10 mA, R_L = 100 Ω	t_{rr}	-	4	ns

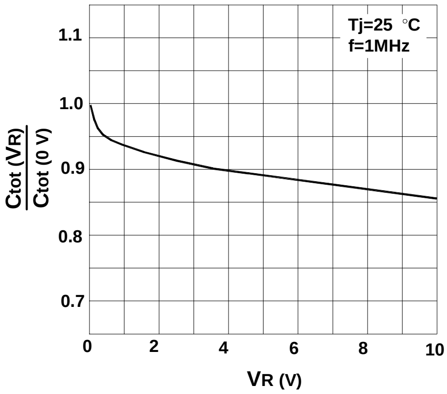
Forward characteristics



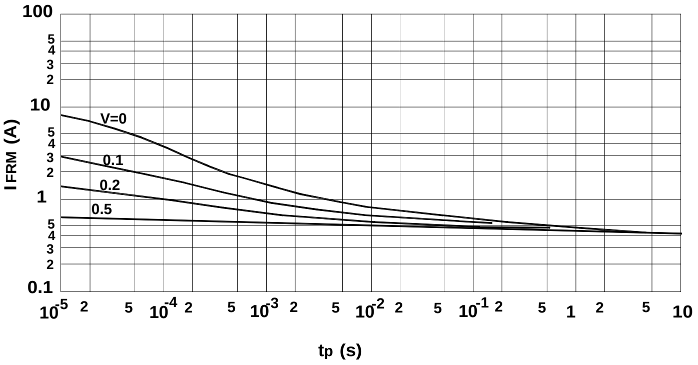
Dynamic forward resistance
vs. forward current



Reverse capacitance vs. reverse voltage

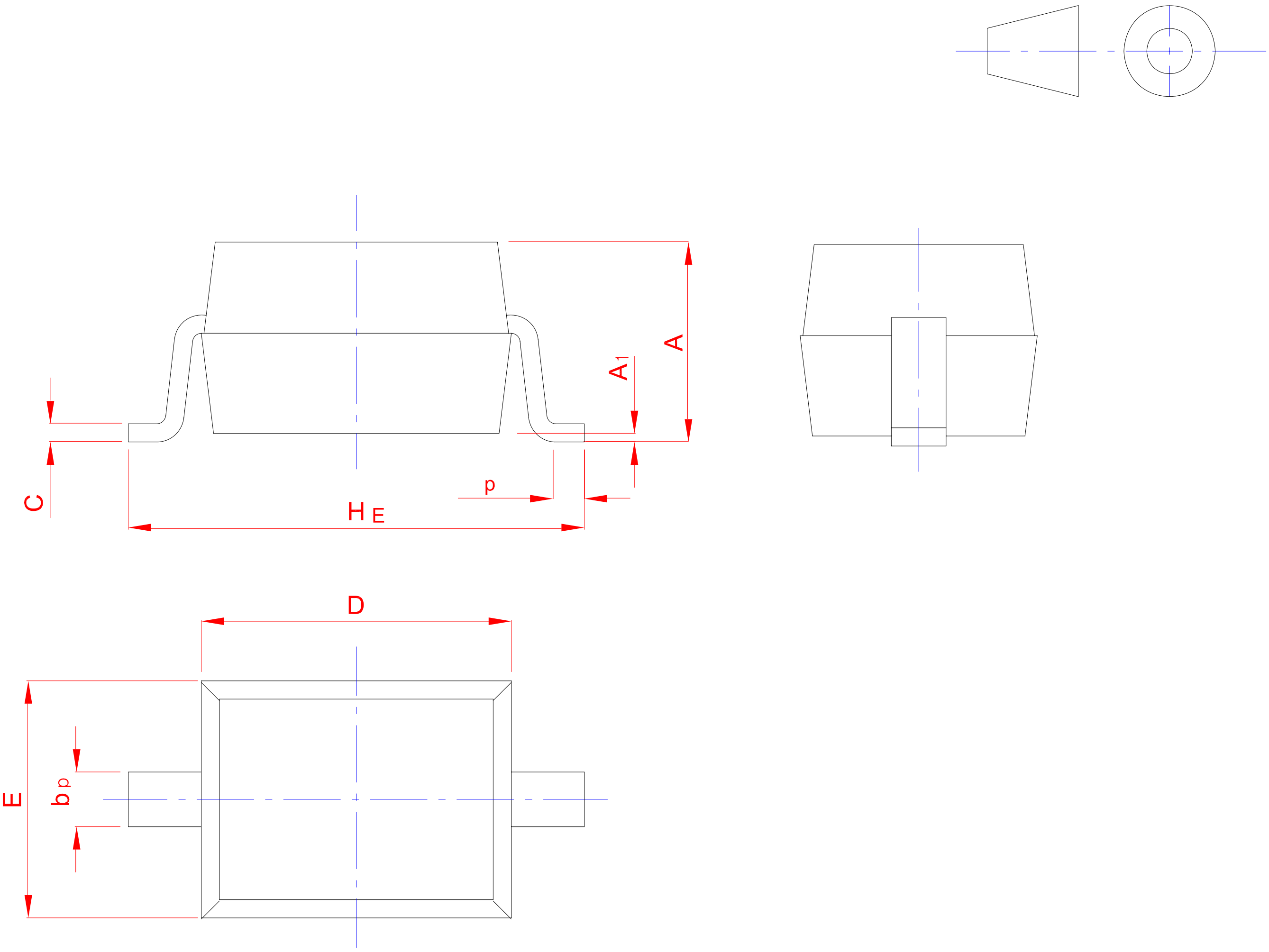


Amissible repetitive peak forward current vs. pulse duration



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-323**



UNIT	A	b_p	C	D	E	H_E	A_1	L_p
mm	1.00 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30	0.10 0.01	0.50 0.20