1N4148WSGH

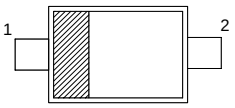
Silicon Epitaxial Planar Switching Diode

Lead free product

Halogen-free type

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Simplified outline SOD-323 and symbol

Features

- Fast switching speed
- Ultra-small surface mount package
- For general purpose switching applications
- High conductance

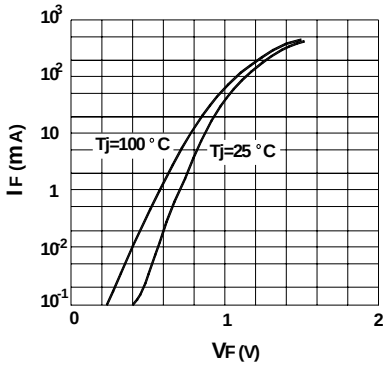
Absolute Maximum Ratings (T_a = 25 °C)

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
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

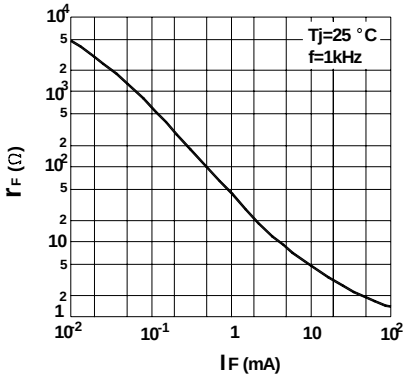
Electrical Characteristics (T_a = 25°C)

Parameter	Symbol	Max.	Unit
Forward Voltage at I_F = 10 mA	V_F	1	V
Reverse Current at V_R = 20 V at V_R = 75 V at V_R = 20 V, T_J = 150 °C	I_R	25 5 50	nA µA µA
Total Capacitance at V_R = 0 V, f = 1 MHz	C_{tot}	4	pF
Reverse Recovery Time at I_F = 10 mA to I_R = 1 mA, V_R = 6 V, R_L = 100 Ω	t_{rr}	4	ns

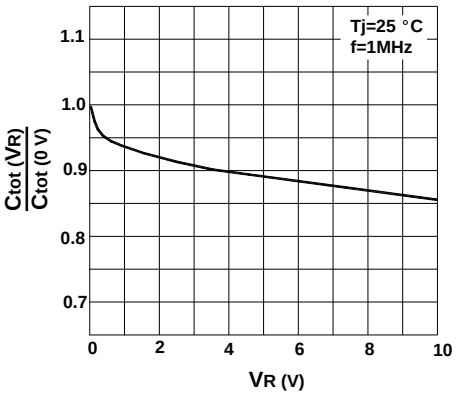
Forward characteristics



Dynamic forward resistance vs. forward current



Reverse capacitance vs. reverse voltage



Amissible repetitive peak forward current vs. pulse duration

