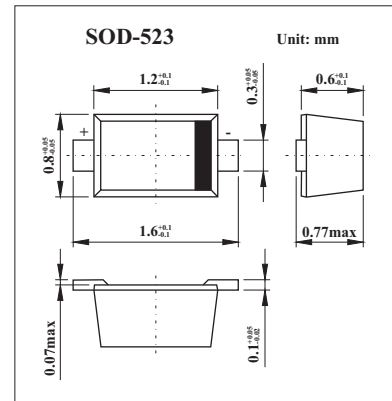


Surface Mount Fast Switching Diode

1N4148S



■ Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Non-repetitive peak reverse voltage	V_{RM}	100	V
Peak repetitive reverse voltage	V_{RRM}		
Working peak reverse voltage	V_{RWM}	75	V
DC blocking voltage	V_R		
RMS reverse voltage	$V_{R(RMS)}$	53	V
Average rectified output current	I_O	150	mA
Forward continuous current	I_{FM}	300	mA
Non-repetitive peak forward surge current	I_{FSM}	@ t = 1.0s	1.0
		@ t = 1.0 μ s	2.0
Power dissipation *	P_D	150	mW
Typical thermal resistance, junction to ambient air*	$R_{\theta JA}$	833	°C/W
Operating and storage temperature range	T_J, T_{stg}	-65 to +150	°C

* Part mounted on FR-4 PC board with recommended pad layout,

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Forward voltage	V_{FM}	$I_F = 10mA$			0.715	V
		$I_F = 10mA$			0.855	
		$I_F = 50mA$			1.0	
		$I_F = 150mA$			1.25	
Peak reverse current	I_{RM}	$V_R = 75V$			1.0	μ A
		$V_R = 75V, T_J = 150^\circ C$			50	
		$V_R = 25V, T_J = 150^\circ C$			30	
		$V_R = 20V$			25	
Capacitance	C_T	$V_R = 0, f = 1.0MHz$			2.0	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 10mA, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$			4.0	ns