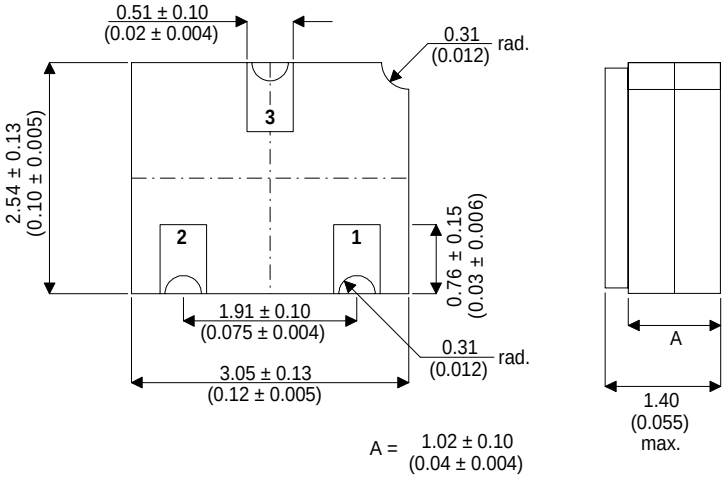
1N4148CSM

SILICON EPITAXIAL PLANAR DIODE

Fast Switching Diode in
Hermetic Ceramic Surface Mount Package
For High Reliability Applications

MECHANICAL DATA
Dimensions in mm (inches)



SOT23 CERAMIC
(LCC1 PACKAGE)

Underside View

PAD 1 — Anode PAD 2 — Not Connected PAD 3 — Cathode

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C unless otherwise stated)

	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
V_R	Reverse Voltage				75	V
V_{RRM}	Repetitive Peak Reverse Voltage				75	V
$I_{F(AV)}$	Average Rectified Forward Current				150	mA
I_F	Forward Current				200	mA
I_{FRM}	Repetitive Peak Forward Current				450	mA
I_{FSM}	Non-Repetitive Peak Forward Current	t = 1μs			2000	mA
		t = 1s			500	
P_{tot}	Power Dissipation at T_{amb} = 25 °C				500	mW

T_{stg}	Storage Temperature Range	-55 to +175 °C
T_j	Max junction temperature	+150°C

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CHARACTERISTICS (T_{case} = 25°C unless otherwise stated)

	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
V_F	Forward Voltage	I_F = 10mA			1	V
I_R	Reverse Current	V_R = 20V			25	nA
		V_R = 20V , T_j = 150°C			50	µA
$V_{(BR)R}$	Reverse Avalanche Breakdown Voltage	I_R = 100µA	100			V
		I_R = 5µA	75			V
C_d	Capacitance	V_R = 0V , f = 1 MHz			4	pF
V_{fr}	Forward Recovery Voltage	I_F = 50mA , t_r = 20ns			2.5	V
t_{rr}	Reverse Recovery Time	I_F = 10mA to I_R = 60mA R_L = 100Ω			4	ns