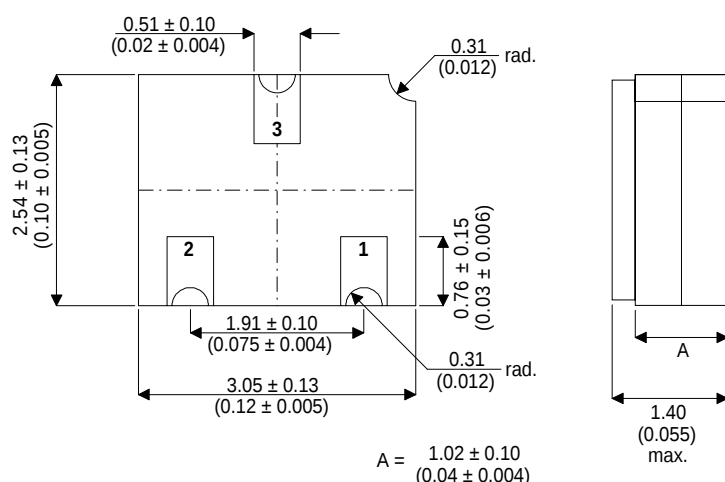


MECHANICAL DATA

Dimensions in mm (inches)



SILICON EPITAXIAL PLANAR DIODE

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

SOT23 CERAMIC (LCC1 PACKAGE)

Underside View

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

ABSOLUTE MAXIMUM RATINGS ($T_{case} = 25^{\circ}\text{C}$ 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	$t = 1\mu\text{s}$		2000	mA
				500	
P_{tot}	Power Dissipation at $T_{amb} = 25^{\circ}\text{C}$			500	mW

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

CHARACTERISTICS ($T_{\text{case}} = 25^{\circ}\text{C}$ unless otherwise stated)

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