

SILICON VARACTOR DIODE

DESCRIPTION:

The **AT9001** is an Abrupt Junction Tuning Varactor Housed in a Surface Mount Package.

MAXIMUM RATINGS

I_C	50 mA
V_{CE}	85 V
P_{DISS}	250 mW @ T _C = 25 °C
T_J	-65 °C to +150 °C
T_{STG}	-65 °C to +150 °C
T_{SOLD}	250 °C

PACKAGE STYLE SOT-23

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.80	3.04	0.1102	0.1197
B	1.20	1.40	0.0472	0.0551
C	0.89	1.11	0.0350	0.0440
D	0.37	0.50	0.0150	0.0200
G	1.78	2.04	0.0701	0.0807
H	0.013	0.100	0.0005	0.0040
J	0.085	0.177	0.0034	0.0070
K	0.45	0.60	0.0180	0.0236
L	0.89	1.02	0.0350	0.0401
S	2.10	2.50	0.0830	0.0984
V	0.45	0.60	0.0177	0.0236

Lead Configuration:
1 = Anode 2 = N.C.
3 = Cathode

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
V_R	I _R = 10 μ	85			V
C_{T-4}	V _R = -4.0 V f = 1.0 MHz	0.8	1.0	1.2	pf
ΔC_T	C _{T0} / C _T -85 V	5.4			---
Q	V _R = -4.0 V f = 50 MHz	1000			---
f_{RANGE}	SUGGESTED FREQUENCY RANGE	2.0		4.0	GHz