

SILICON HYPERABRUPT TUNING VARACTOR

DESCRIPTION:

The **ASI SMV1229-001** is a Silicon Hyperabrupt Tuning Varactor Diode Designed for VHF Applications.

MAXIMUM RATINGS

I_F	40 mA
V_R	15 V
P_{DISS}	200 mW @ T _A = 25 °C
T_J	-55 °C to +175 °C
T_{STG}	-55 °C to +175 °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	0.385	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

PIN 1 = ANODE PIN 2 = CATHODE

CHARACTERISTICS T_A = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
V _R	I _R = 10 μA	15	18		V
I _R	V _R = 10 V		30	100	nA
C _{T4}	V _R = 4.0 V f = 1.0 MHz	105		115	pF
C _{T8}	V _R = 8.0 V f = 1.0 MHz	41		48.6	pF
ΔC _T	V _R = 4.0 to 8.0 V f = 1.0 MHz	1.8		2.8	RATIO
Q	V _R = 4.0V f = 50 MHz	80	110		