

# SILICON HYPERABRUPT TUNING VARACTOR

**DESCRIPTION:**

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

**MAXIMUM RATINGS**

<b>I<sub>F</sub></b>	40 mA
<b>V<sub>R</sub></b>	15 V
<b>P<sub>DISS</sub></b>	200 mW @ T <sub>A</sub> = 25 °C
<b>T<sub>J</sub></b>	-55 °C to +175 °C
<b>T<sub>STG</sub></b>	-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<sub>A</sub> = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
V <sub>R</sub>	I <sub>R</sub> = 10 μA	15	18		V
I <sub>R</sub>	V <sub>R</sub> = 10 V		30	100	nA
C <sub>T4</sub>	V <sub>R</sub> = 4.0 V			115	pF
C <sub>T8</sub>	V <sub>R</sub> = 8.0 V			48.6	pF
ΔC <sub>T</sub>	V <sub>R</sub> = 4.0 to 8.0 V			2.8	RATIO
Q	V <sub>R</sub> = 4.0V		110		