

# SILICON HYPERABRUPT VARACTOR DIODE

## DESCRIPTION:

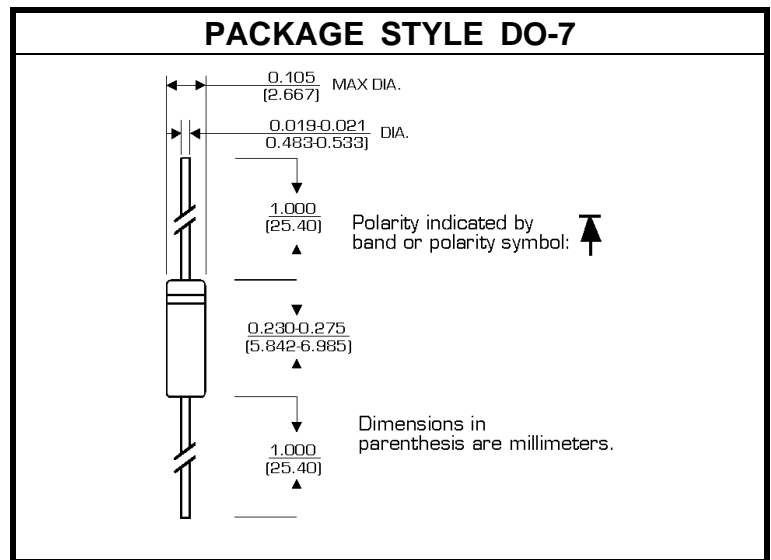
The **ASI DKV6510-12** is an Ion Implanted Silicon Hyperabrupt Varactor Diode Designed for Octave Tuning up to 500 MHz.

## FEATURES INCLUDE:

- Large Tuning Ratio – **14:1** Typ.
- High **Q** – **700** Typ.
- Hermetic Glass **DO-7** Package

## MAXIMUM RATINGS

<b>I<sub>F</sub></b>	100 mA
<b>V<sub>R</sub></b>	12 V
<b>P<sub>DISS</sub></b>	400 mW @ T <sub>C</sub> = 25 °C
<b>T<sub>J</sub></b>	-55 °C to +150 °C
<b>T<sub>STG</sub></b>	-65 °C to +200 °C



## CHARACTERISTICS T<sub>C</sub> = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>V<sub>BR</sub></b>	I <sub>R</sub> = 10 μA	12			<b>V</b>
<b>I<sub>R</sub></b>	V <sub>R</sub> = 10 V			100	<b>mA</b>
<b>C<sub>T2</sub></b>	V <sub>R</sub> = 2.0 V		f = 1.0 MHz	75	<b>pF</b>
<b>C<sub>T10</sub></b>	V <sub>R</sub> = 10 V		f = 1.0 MHz	7.0	<b>pF</b>
<b>C<sub>T2</sub> / C<sub>T10</sub></b>	V <sub>R</sub> = 2 & 10 V		f = 1.0 MHz	17.0	<b>---</b>
<b>Q</b>	V <sub>R</sub> = 2.0 V		f = 1.0 MHz	700	<b>---</b>