

# SILICON PIN DIODE CHIP

**DESCRIPTION:**

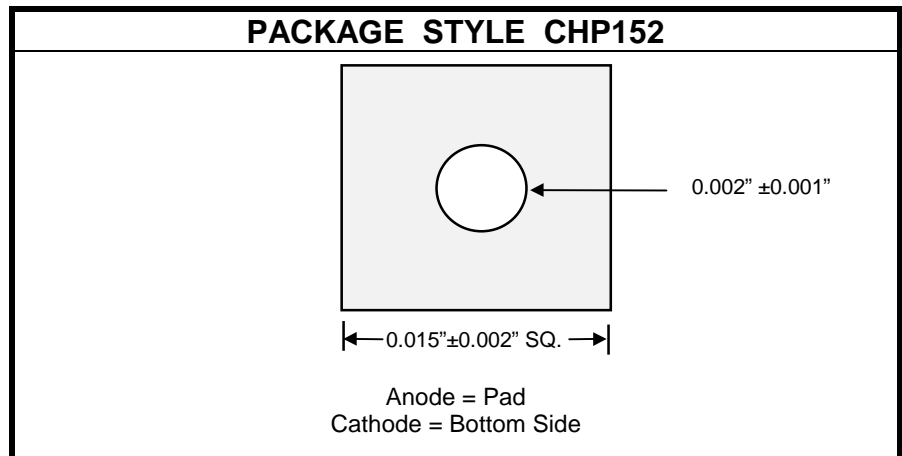
The **AP1000B-00** is a Planar Silicon PIN Diode Chip Designed for High Speed Switch and Limiter Applications Up to 18 GHz.

**FEATURES INCLUDE:**

- **Low Capacitance** - 0.10 pF Typical
- **Fast Switching** - 10 nS Typical
- **SiO<sub>2</sub> Passivation**

**MAXIMUM RATINGS**

<b>I<sub>F</sub></b>	100 mA
<b>V<sub>R</sub></b>	100 V
<b>P<sub>DISS</sub></b>	0.5 W @ T <sub>A</sub> = 25 °C
<b>T<sub>J</sub></b>	-65 °C to +150 °C
<b>T<sub>STG</sub></b>	-65 °C to +150 °C
<b>θ<sub>JC</sub></b>	50 °C/W


**CHARACTERISTICS** T<sub>A</sub> = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>V<sub>BR</sub></b>	I <sub>R</sub> = 10 μA	100			<b>V</b>
<b>C<sub>J</sub></b>	V <sub>R</sub> = 10 V f = 1.0 MHz			0.10	<b>pF</b>
<b>R<sub>S</sub></b>	I <sub>F</sub> = 20 mA f = 100 MHz		1.0	2.0	<b>Ohms</b>
<b>T<sub>L</sub></b>	I <sub>F</sub> = 10 mA I <sub>R</sub> = 6.0 mA		100		<b>nS</b>
<b>t<sub>rr</sub></b>	I <sub>F</sub> = 20 mA V <sub>R</sub> = 10 V			10	<b>nS</b>