

SILICON PIN DIODE CHIP

DESCRIPTION:

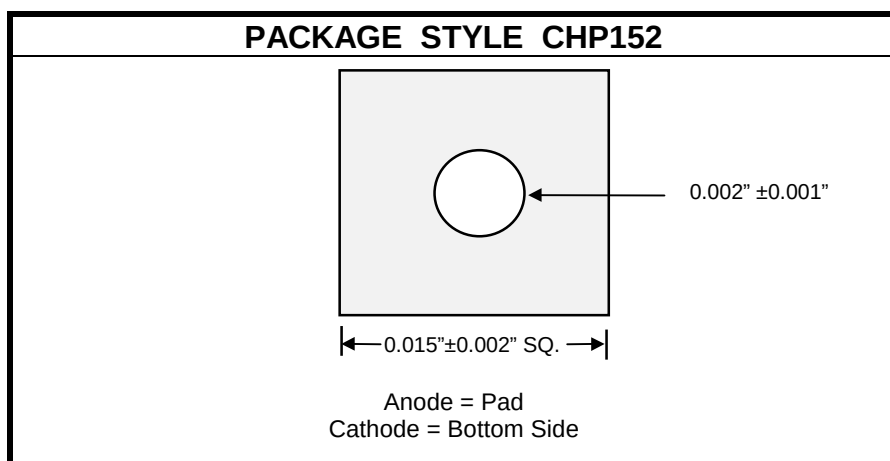
The **AP1000B-00** is a Planar Silicon PIN Diode Chip Designed for High Speed Switch and Limiter Applications Up to 18 GHz.

FEATURES INCLUDE:

- **Low Capacitance** - 0.10 pF Typical
- **Fast Switching** - 10 nS Typical
- **SiO₂ Passivation**

MAXIMUM RATINGS

I_F	100 mA
V_R	100 V
P_{DISS}	0.5 W @ $T_A = 25^\circ\text{C}$
T_J	-65°C to $+150^\circ\text{C}$
T_{STG}	-65°C to $+150^\circ\text{C}$
θ_{JC}	50 $^\circ\text{C/W}$



CHARACTERISTICS $T_A = 25^\circ\text{C}$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
V_{BR}	$I_R = 10 \mu\text{A}$	100			V
C_J	$V_R = 10 \text{ V}$ $f = 1.0 \text{ MHz}$			0.10	pF
R_S	$I_F = 20 \text{ mA}$ $f = 100 \text{ MHz}$		1.0	2.0	Ohms
T_L	$I_F = 10 \text{ mA}$ $I_R = 6.0 \text{ mA}$		100		nS
t_{rr}	$I_F = 20 \text{ mA}$ $V_R = 10 \text{ V}$			10	nS