



AP2000A-00

## SILICON PIN DIODE CHIP

### DESCRIPTION:

The **AP2000A-00** is a Planar Silicon PIN Diode Chip Designed for Medium Speed Switching Applications Up to 18 GHz.

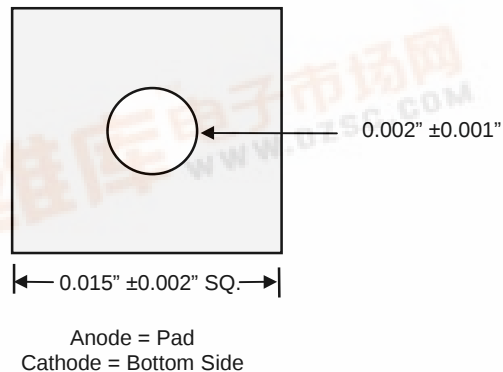
### FEATURES INCLUDE:

- Low Capacitance - 0.10 pF Typical
- Fast Switching - 15 nS Typical
- SiO<sub>2</sub> Passivation

### MAXIMUM RATINGS

|               |                                             |
|---------------|---------------------------------------------|
| $I_F$         | 100 mA                                      |
| $V_R$         | 120 V                                       |
| $P_{DISS}$    | 0.5 W @ $T_A = 25^\circ\text{C}$            |
| $T_J$         | $-65^\circ\text{C}$ to $+175^\circ\text{C}$ |
| $T_{STG}$     | $-65^\circ\text{C}$ to $+200^\circ\text{C}$ |
| $\theta_{JC}$ | 45 $^\circ\text{C/W}$                       |

### PACKAGE STYLE CHP152



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

| SYMBOL   | TEST CONDITIONS                              | MINIMUM | TYPICAL | MAXIMUM | UNITS    |
|----------|----------------------------------------------|---------|---------|---------|----------|
| $V_{BR}$ | $I_R = 10\ \mu\text{A}$                      | 120     |         |         | V        |
| $C_J$    | $V_R = 10\ \text{V}$ $f = 1.0\ \text{MHz}$   |         |         | 0.10    | pF       |
| $R_S$    | $I_F = 10\ \text{mA}$ $f = 100\ \text{MHz}$  |         | 1.0     | 1.5     | $\Omega$ |
| $T_L$    | $I_F = 10\ \text{mA}$ $I_R = 6.0\ \text{mA}$ |         | 150     |         | nS       |
| $t_{rr}$ | $I_F = 20\ \text{mA}$ $V_R = 10\ \text{V}$   |         |         | 15      | nS       |

