

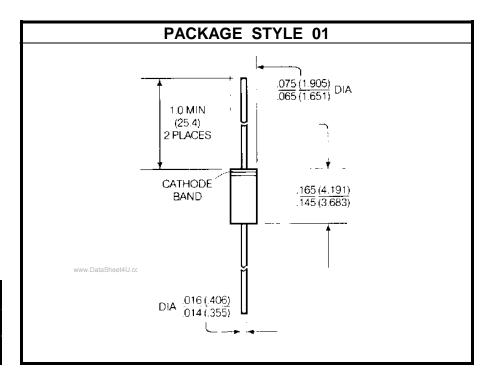
## SILICON PIN DIODE CHIP

## **DESCRIPTION:**

The **AP300A-00** is a Passivated Epitaxial Silicon PIN Diode Housed in a Hermetically Sealed Glass Package. This Device is Designed to Cover a Wide Range of Control Applications Such as RF Switching, Phase Shifting, Modulation, Duplexing Limiting and Pulse Forming.

## **MAXIMUM RATINGS**

| l <sub>F</sub>    | 100 mA                          |  |  |  |  |
|-------------------|---------------------------------|--|--|--|--|
| $\mathbf{V}_{R}$  | 300 V                           |  |  |  |  |
| P <sub>DISS</sub> | 250 mW @ T <sub>A</sub> = 25 °C |  |  |  |  |



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

| SYMBOL         | TEST CONDITIONS                              |                        |             | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|----------------|--|------------------------|-------------|---------|---------|---------|-------|
| $V_{BR}$       | $I_R = 10 \mu A$                             |                        |             | 300     |         |         | ٧     |
| C¹             | $V_R = 50 \text{ V}$<br>$V_R = 40 \text{ V}$ |                        | f = 1.0 MHz |         |         | 0.2     | pF    |
| R <sub>s</sub> | I <sub>F</sub> = 50 mA                       |                        | f = 100 MHz |         |         | 0.6     | Ohms  |
| T∟             | I <sub>F</sub> = 10 mA                       | $I_R = 6.0 \text{ mA}$ |             |         | 1000    |         | nS    |
| $T_{rr}$       | $I_F = 20 \text{ mA}$                        | $I_R = 100 \text{ mA}$ |             |         | 100     |         | nS    |
| O <sub>R</sub> | THERMAL RES                                  | ISTANCE                |             |         |         | 20      | °C/W  |