

MICROSTRIP/STRIPLINE PIN DIODE SWITCH

DESCRIPTION:

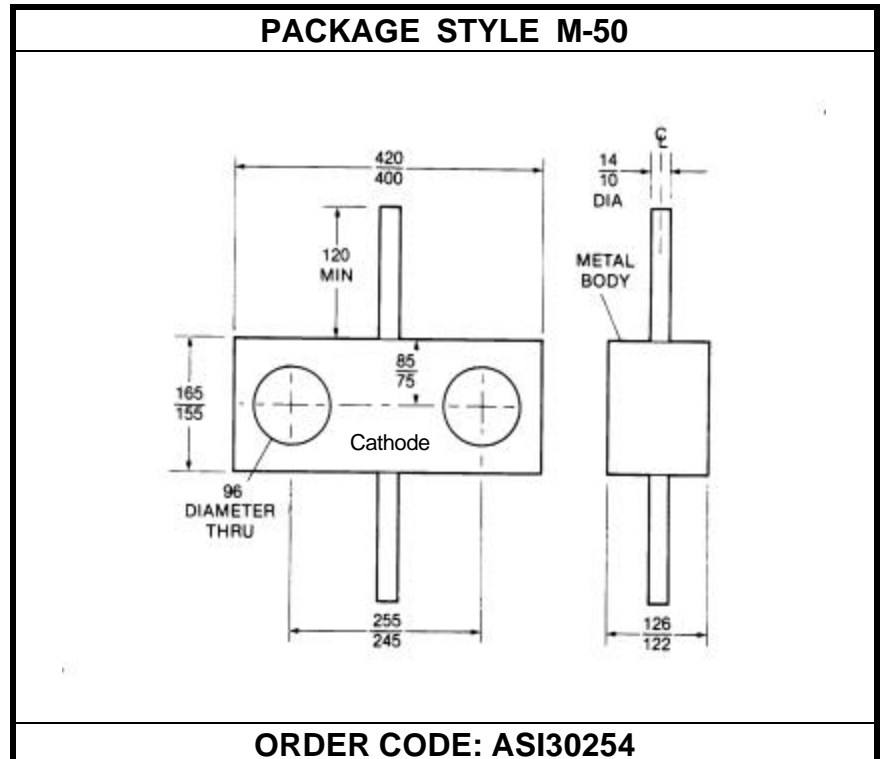
The **ASI 5082-3340** is a Silicon PIN Diode Module Designed for Reflective Attenuator and Switching Applications from 1 to 18 GHz.

FEATURES INCLUDE:

- Direct Replacement for **HP 5082-3340**
- Isolation = 20 dB min. at 10 GHz
- Hermetic Package

MAXIMUM RATINGS

| | |
|------------|---|
| I_F | 250 mA |
| V_R | 150 V |
| P_{DISS} | 2.5 W @ $T_C = 25^\circ\text{C}$ |
| T_J | -65°C to $+150^\circ\text{C}$ |
| T_{STG} | -65°C to $+150^\circ\text{C}$ |
| q_{JC} | 50°C/W |



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

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-----------|--|---------|---------|---------|-------|
| V_{BR} | $I_R = 10 \mu\text{A}$ | 150 | | | V |
| V_F | $I_F = 100 \text{ mA}$ | | | 1.0 | V |
| t | $I_F = 50 \text{ mA}$ $I_R = 250 \text{ mA}$ | | 400 | | mS |
| I_L | $I_F = 0 \text{ mA}$ $P_{IN} = 0 \text{ dBm}$ $f = 10 \text{ GHz}$ | | | 0.5 | dB |
| I_L | $I_F = 100 \text{ mA}$ $P_{IN} = 0 \text{ dBm}$ $f = 10 \text{ GHz}$ | 20 | | | dB |
| V_{SWR} | $I_F = 0 \text{ mA}$ $P_{IN} = 0 \text{ dBm}$ $f = 10 \text{ GHz}$ | | | 1.5:1 | --- |

NOTE: The **ASI 5082-3340** was designed to be a single piece hermetic replacement for the **HP 5082-3340** diode. It features an internal low pass filter structure with a corner frequency of 20 GHz which yields insertion loss and isolation performance equivalent to the original HP device while maintaining mechanical compatible in most applications.