

# MICROSTRIP/STRIPLINE PIN DIODE SWITCH

#### **DESCRIPTION:**

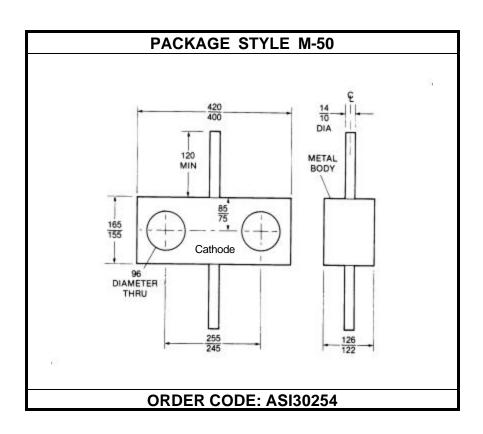
The **ASI 5082-3340** is a Silicon PIN Diode Module Designed for Reflective Attenuator and Switching Applications from 1 to 18 GHz.

#### **FEATURES INCLUDE:**

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

### **MAXIMUM RATINGS**

I <sub>F</sub>	250 mA					
$V_{R}$	150 V					
P <sub>DISS</sub>	$2.5 \text{ W } @ \text{ T}_{\text{C}} = 25  {}^{\text{O}}\text{C}$					
$T_J$	-65 <sup>o</sup> C to +150 <sup>o</sup> C					
T <sub>STG</sub>	-65 °C to +150 °C					
<b>q</b> JC	50 °C/W					



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

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
$V_{BR}$	$I_R = 10 \mu A$			150			٧
$V_{F}$	I <sub>F</sub> = 100 mA					1.0	٧
t	I <sub>F</sub> = 50 mA	$I_R = 250 \text{ mA}$			400		<b>1116</b>
I <sub>L</sub>	$I_F = 0 \text{ mA}$	$P_{IN} = 0 \text{ dBm}$	f = 10 GHz			0.5	dB
IL	I <sub>F</sub> = 100 mA	P <sub>IN</sub> = 0 dBm	f = 10 GHz	20			dB
V <sub>SWR</sub>	$I_F = 0 \text{ mA}$	$P_{IN} = 0 dBm$	f = 10 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.