

# MICROSTRIP/STRIPLINE PIN DIODE SWITCH

## DESCRIPTION:

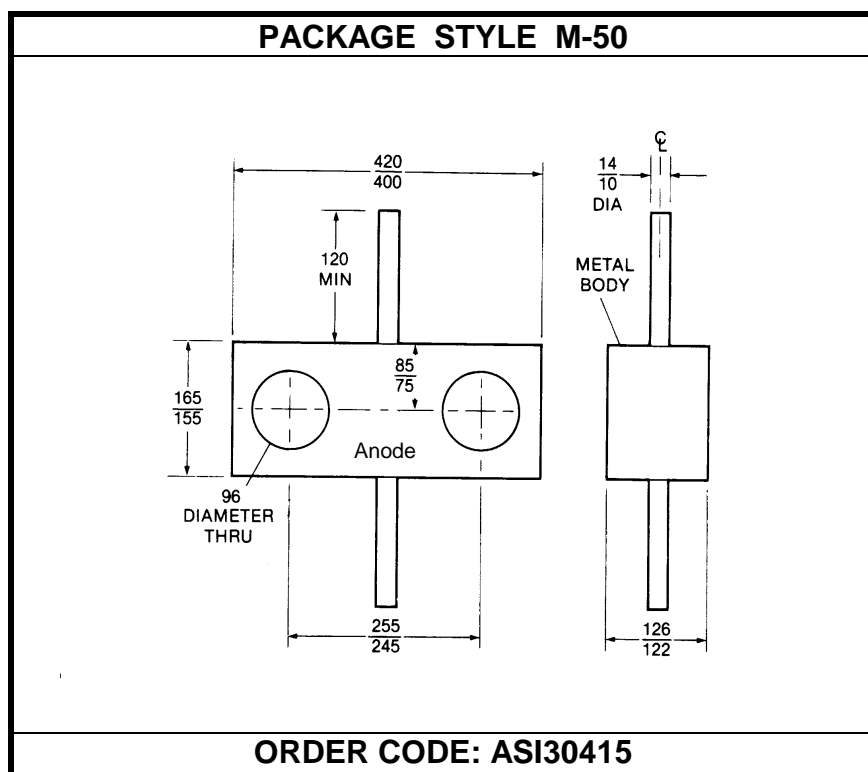
The **ASI 5082-3040** is a Silicon PIN Diode Module Designed for Reflective Attenuator and Switching Applications from 1 GHz to 18 GHz.

## FEATURES INCLUDE:

- Direct Replacement for **HP 5082-3040**
- Isolation = 20 dB min. at 10 GHz
- Hermetic Package

## MAXIMUM RATINGS

$I_F$	250 mA
$V_R$	70 V
$P_{DISS}$	2.5 W @ $T_C = 25^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+125^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+125^\circ\text{C}$
$\theta_{JC}$	40 $^\circ\text{C/W}$



## 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
$\tau$	$I_F = 50 \text{ mA}$	$I_R = 250 \text{ mA}$			400		nS
$I_L$	$I_F = 0 \text{ mA}$	$P_{IN} = 1.0 \text{ mW}$	$F = 10 \text{ GHz}$			0.5	dB
I	$I_F = 100 \text{ mA}$	$P_{IN} = 1.0 \text{ mW}$	$F = 10 \text{ GHz}$	20			dB
SWR	$I_F = 0 \text{ mA}$	$P_{IN} = 1.0 \text{ mW}$	$F = 10 \text{ GHz}$			1.5:1	---

**NOTE:** The **ASI 5082-3040** was designed to be a single piece hermetic replacement for the **HP 5082-3040** 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.