

MICROSTRIP/STRIPLINE PIN DIODE SWITCH

DESCRIPTION:

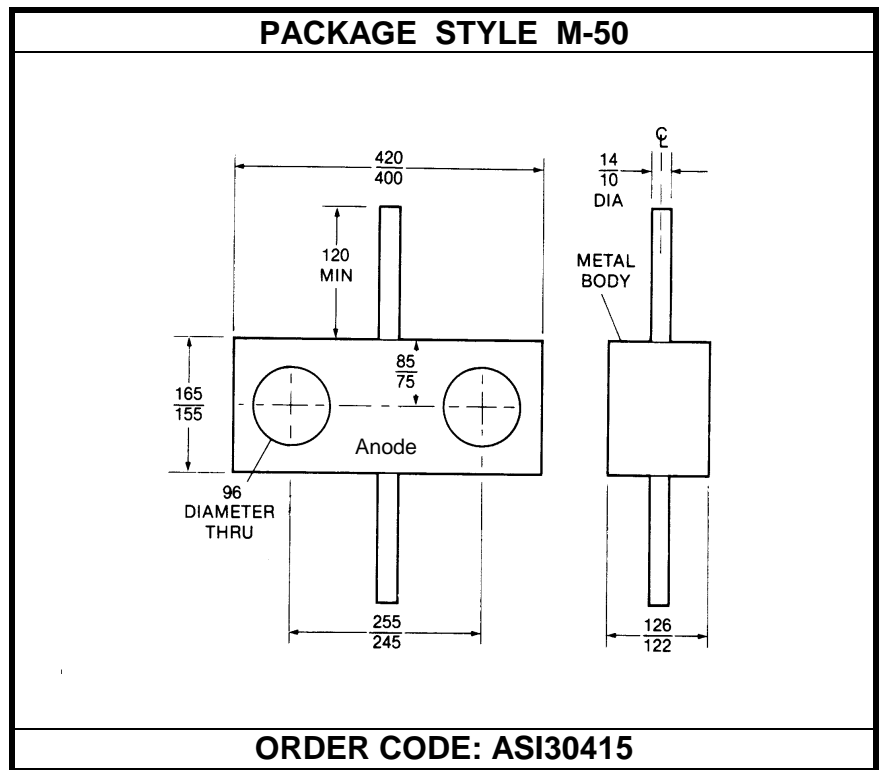
The **ASI 5082-3040** is a Silicon PIN Diode Module Designed for Reflective Attenuator and Switching Applications from 1 GHz to 18 GHz.

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 @ $T_C = 25^\circ C$
T_J	-65 °C to +125 °C
T_{STG}	-65 °C to +125 °C
θ_{JC}	40 °C/W


CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
V_{BR}	$I_R = 10 \mu A$			150			V
V_F	$I_F = 100 \text{ mA}$					1.0	V
τ	$I_F = 50 \text{ mA}$	$I_R = 250 \text{ mA}$			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.