

# KRATOS | GENERAL MICROWAVE Microwave Electronics Division

## MODEL 7929

### MILLIMETER WAVE PHASE SHIFTER

KRATOS GENERAL MICROWAVE is a world leader in the design and production of Microwave Phase Shifters. The Microwave Phase Shifters product line includes a wide range of catalog Phase Shifters covering the frequencies up to 40.0 GHz.

#### Main Features

- 18 to 40 GHz
- 360° Phase Change
- High Speed
- Digitally Controlled (10 Bits)
- Monotonicity Guaranteed
- Airborne Environment



#### Applications

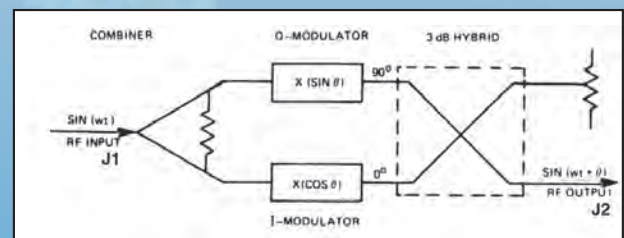
Model 7929 is a MMW PIN diode phase shifter covering the frequency range from 18 to 40 GHz providing a full 360° range of variable phase shift. Phase Shifter Model 7929 is a catalog COTS product designed for use in various electronics systems such as Simulators, Test Systems and as an instrument in Microwave Laboratories.

#### Phase Shift

Phase shifting is achieved utilizing the RF vector modulator approach shown in the following diagram. The 3-dB hybrid coupler divides the RF signal into two quadrature components which are then biased in proportion to the sine and cosine of the desired phase shift. The signals are then combined in-phase to yield the desired output.

#### Accuracy

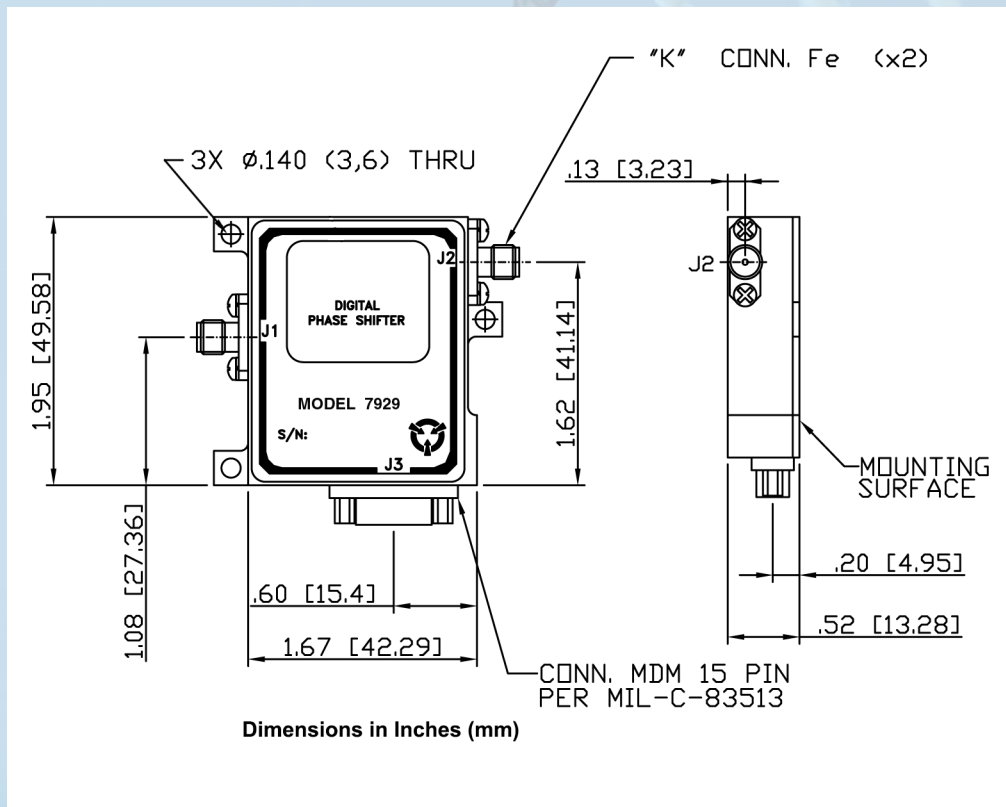
Improved phase accuracy and PM/AM performance are achieved by using double-balanced bi-phase linear amplitude modulators. In the operating band, overall phase accuracy is better than 15°.



# Main specifications - Phase Shifter Model 7929

	PARAMETER	SPECIFICATION
1	Frequency Range (GHz)	18 to 40
2	Phase Shift Range (Degrees)	360
3	Phase Accuracy (Degrees)	±15
4	Insertion Loss, max. (dB)	15.0
5	Number Of Control Bits	10
6	Switching Speed, max. (nsec)	500
7	PM/AM (dB)	±2

## Dimensions and Outline



### KRATOS | GENERAL MICROWAVE Microwave Electronics Division

#### ISRAEL

#### JERUSALEM SITE:

20 Pierre Koenig

Jerusalem 9153102

Tel: +972-2-568-9444

kratos-gmi@kratos-med.com

#### ISRAEL

#### EYAL SITE:

Kibbutz Eyal

D.N.Hasharon Hatichon 4584000

Tel: +972-9-749-9100

kratos-eyal@kratos-med.com

#### USA

#### NEW YORK SITE:

227A Michael Drive

Syosset, New York 11791

Tel: +1-516-802-0900

kratos-gmc@kratosdefense.com

[www.kratosmed.com](http://www.kratosmed.com)