Microwave Applications Group (MAG) continues to broaden its product line in response to customer requests and is pleased to offer non-reciprocal toroidal phase shifters. Production quantities of these X-Band units have been delivered and accepted.

Tuning inputs and outputs yields successful performance over a minimum of 600 MHz bandwidth at different points in the X-Band range.

**Good VSWR**

**Low Insertion Loss**

**Minimal Insertion Phase Variation**

**INSERTION LOSS**

-0 dB  
-.4 dB

F<sub>low</sub>  600 MHz BANDWIDTH  F<sub>high</sub>

**RETURN LOSS**

-0 dB  
-20 dB  
-40 dB

F<sub>low</sub>  600 MHz BANDWIDTH  F<sub>high</sub>
Toroid Ferrite Phase Shifters

Return Loss: –20.8 dB max (1.2:1 max)

Insertion Loss: 0.65 dB max

Differential Phase Shift: greater than 200 degrees

Insertion Phase Variation: 0.4 degree RF per °C max

Peak Power: 1.5 kW min

Outline and Mounting

DIMENSIONS IN MILLIMETERS [INCHES]

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