

Xinger III

Directional Coupler 20 dB



Description

The XMC0812F1-20G is a low profile, high performance 20Db directional coupler in a new easy to use, manufacturing friendly surface mount package. The XMC0812F1-20G is designed particularly for X band radar applications and other applications where low insertion loss is required. It can be used in high power applications up to 25* watts.

Parts have been subjected to rigorous qualification testing and they are manufactured using materials with coefficients of thermal expansion (CTE) compatible with common substrates such as FR4, G-10, RF-35, RO4350 and polyimide. Available in 6 of 6 ENIG (XMC0812F1-20G) RoHS compliant finish.

Features:

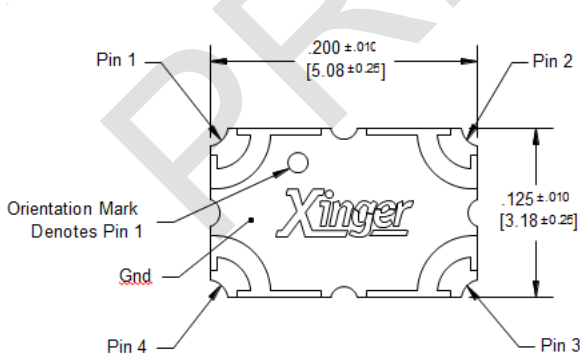
- 8000-12000 MHz
- X Band Radar
- High Power
- Very Low Loss
- Production Friendly
- Tape and Reel
- ENIG Finish

Electrical Specifications **

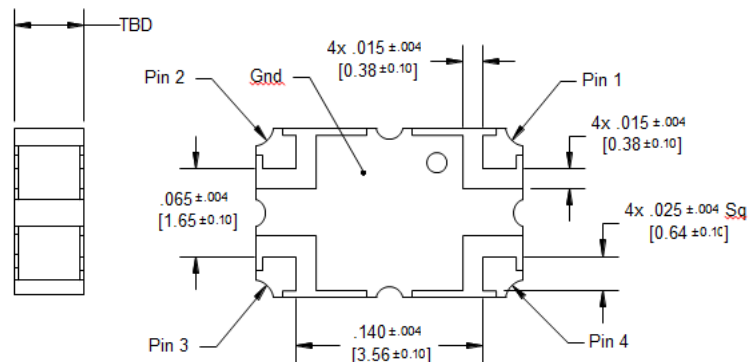
Frequency <i>MHz</i>	Mean Coupling <i>dB Min</i>	Insertion Loss <i>dB Max</i>	VSWR <i>Max : 1</i>	Directivity <i>dB Min</i>
8000-12000	20 ± 1.00	0.50	1.22	20
Frequency Sensitivity <i>dB Max</i>	Power <i>Avg. CW Watts</i>	ΘJC <i>°C/Watt</i>	Operating Temp. <i>°C</i>	
± 0.50	25*	TBD	-55 to +85	

**Specification based on performance of unit properly installed on Anaren Test Board 67406-0001 with small signal applied. Specifications subject to change without notice. Refer to parameter definitions for details.

Mechanical Outline



Dimensions are in Inches [Millimeters]

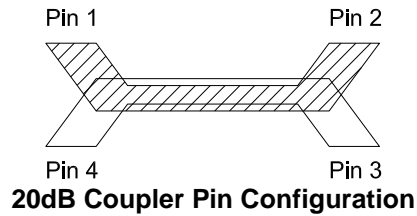


Tolerances are Non-cumulative



Directional Coupler Pin Configuration

The XMC0812F1-20G has an orientation marker to denote Pin 1. Once port one has been identified the other ports are known automatically. Please see the chart below for clarification:



Pin 1	Pin 2	Pin 3	Pin 4
Input	Direct	Isolated	Coupled
Direct	Input	Coupled	Isolated

Note: The direct port has a DC connection to the input port and the coupled port has a DC connection to the isolated port.

For optimum IL and power handling performance, use Pin 1 or Pin 2 as inputs.

