

Waveguide Dual-Directional Coupler

WR-10/75-110GHz/10dB Coupling

Model: TDC-075110-10-10

TDC-075110-10-10 is a four-port waveguide dual-directional coupler that delivers a 10 dB nominal coupling level and 30 dB minimum directivity across the full waveguide band from 75 to 110 GHz. The interfaces of the dual-directional coupler configuration offers an inline structure with WR-10 waveguides and UG-387/U-M anticocking flanges.

Features:

- Operating Frequency 75 to 110GHz
- Full Band Operation
- Low Insertion Loss
- Moderate Directivity

Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

电气特性 Electrical Characteristics:

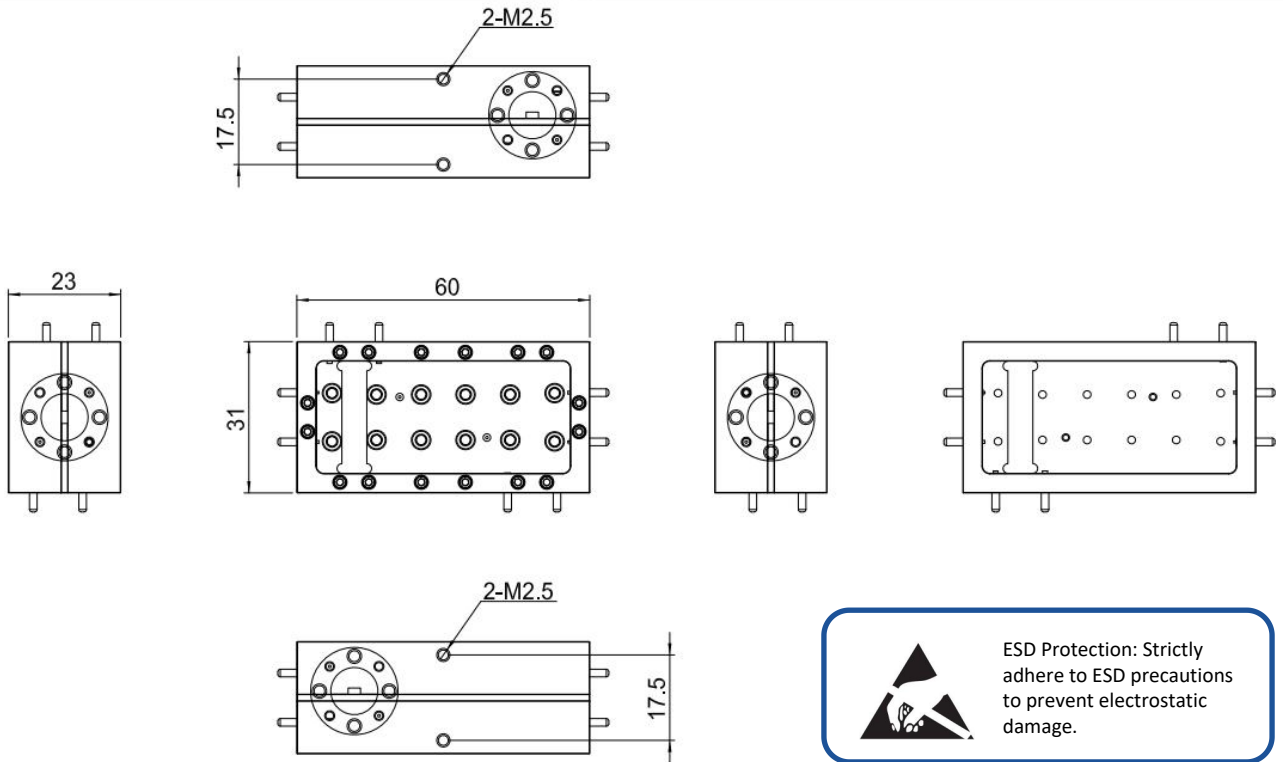
参数 Parameter	Min	Typ	Max	单位 Units
工作频率 Frequency Range	75		110	GHz
主线驻波 Main Line VSWR		1.1		:1
耦合口驻波 Coupling Port VSWR		1.3		:1
插入损耗 Insertion Loss		2		dB
耦合度 Coupling		10		dB
方向性 Directivity	30			dB

环境和机械特性 Envirionmental And Physical Characteristics:

类型 Description	参数 Parameter	单位 Units
材质 Material	Brass	
表面处理 Finish	Gold plated	
波导接口 Waveguide Connectors	WR-10/UG387/U	
耦合接口 Coupled Port	WR-10/UG387/U	
尺寸 Size	60*31*23	mm

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



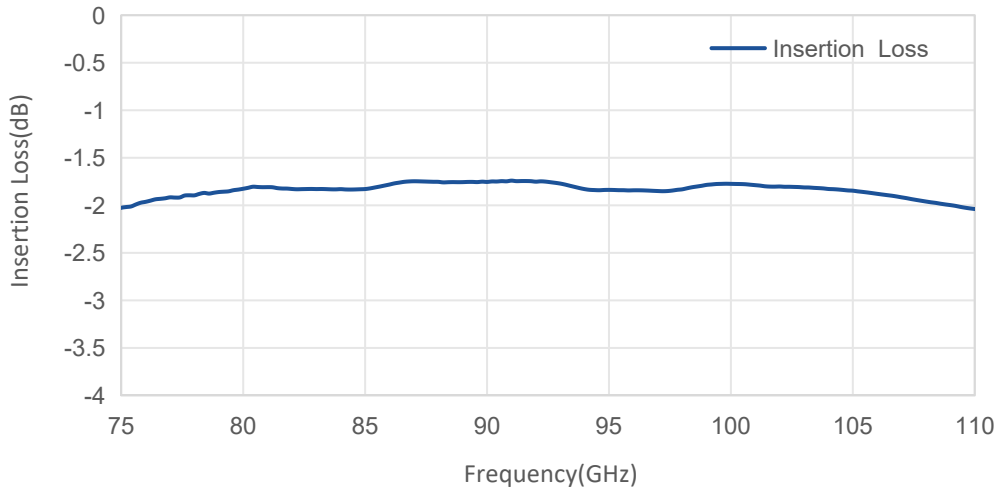
ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

订货信息 Ordering Information:

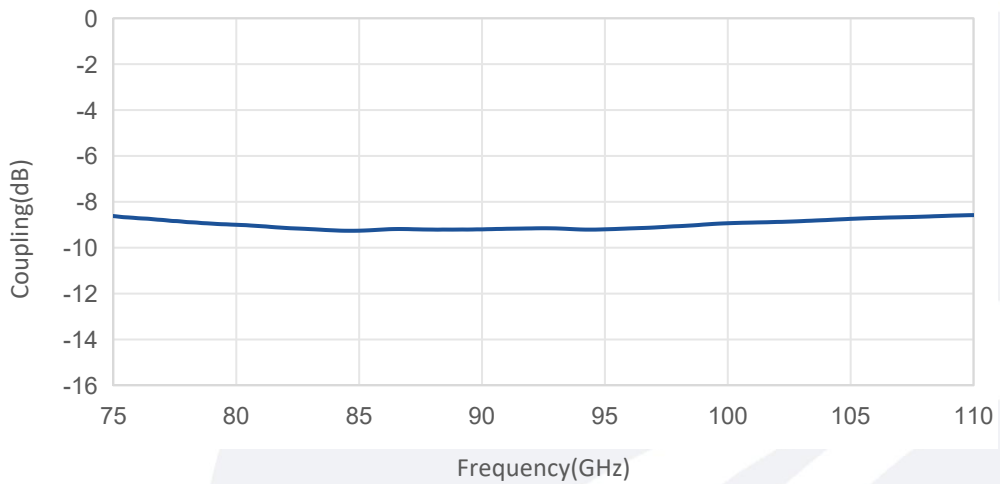
标准型号 Base Number	描述 Description	版本号 Revision
TDC-075110-10-10	Waveguide Dual-Directional Coupler, 75-110GHz, Insertion Loss: 2dB Typ, Coupling: 10dB Typ, WR-10	Rev.1.0

典型曲线 Typical Performance Data:

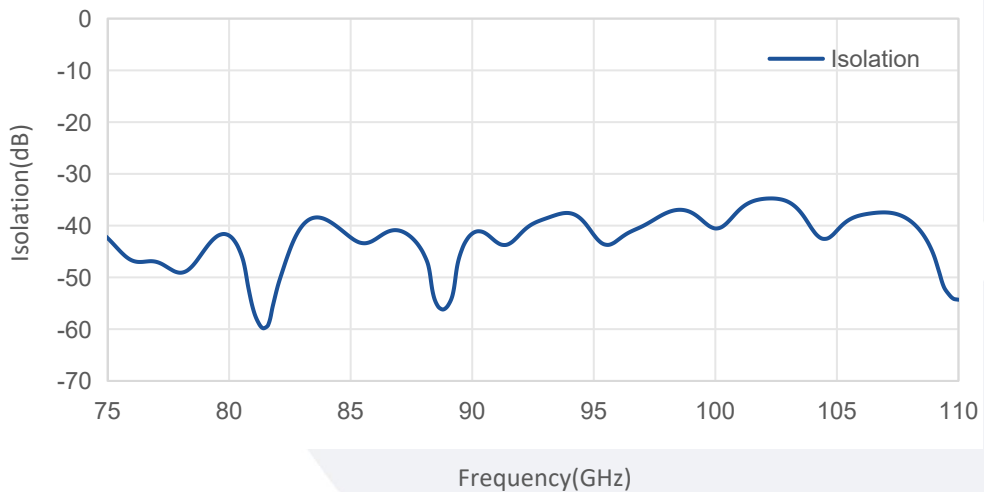
Insertion Loss vs Frequency



Coupling vs Frequency



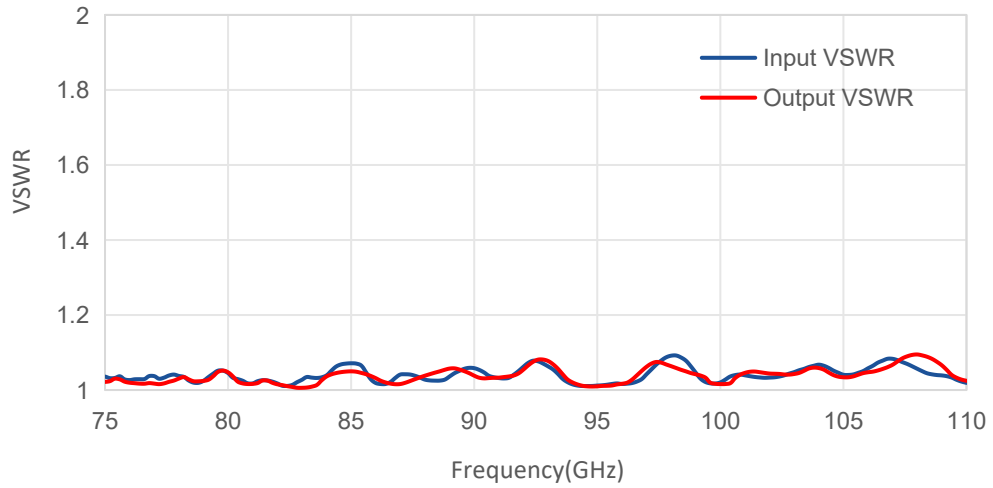
Isolation vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

VSWR vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.