

# YC122-83

WR-12 Y-junction circulator



**MicroHarmonics**

*Superior mm-Wave Components*

## 81-86 GHz Bandwidth

### Specifications

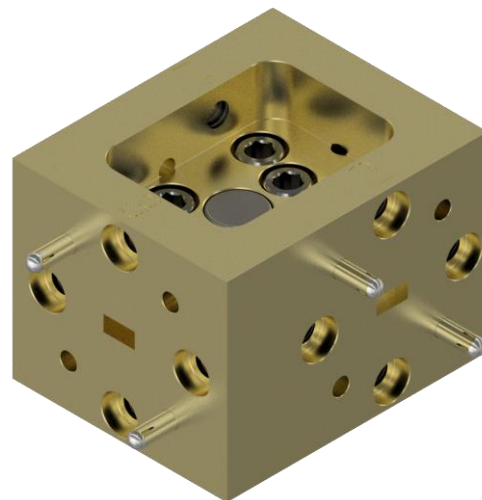
Flange	WR-12 UG-387/U
Frequency (GHz)	81-86
Insertion Loss (dB, avg)	0.4
Insertion Loss (dB, max)	0.8
Isolation (dB, min)	18
Return Loss (dB, typ min)	20
VSWR (typ max)	1.25:1
Maximum Power (W)	3.0

### WR-12 Y-Junction Circulator

Y-junction circulators are a good solution in applications with moderate to low bandwidth requirements. Peak isolation and minimum port reflections naturally occur in the same part of the band yielding optimum performance.

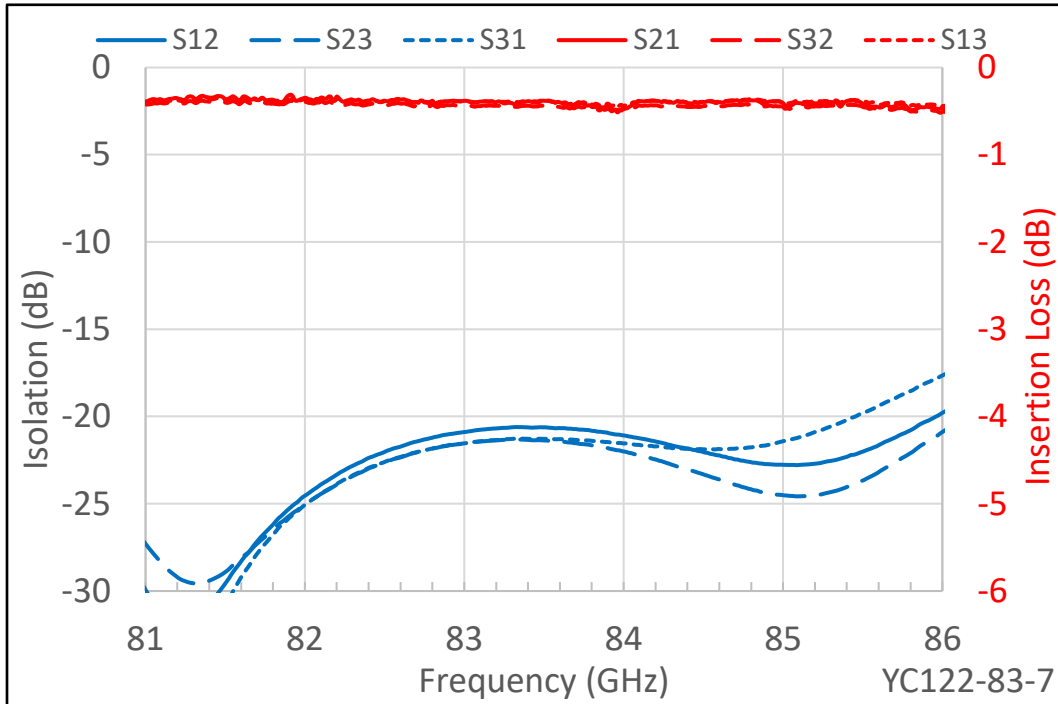
All impedance matching is done through precision machining of the internal waveguide structures. No complicated dielectric elements are used. This approach yields a more repeatable and symmetric response between the three circulator ports. The three ports are equidistant from the ferrite disc.

- ◆ **Widest bandwidth for Y-junction**
- ◆ **Internal waveguide screw access**
- ◆ **Anti-cocking waveguide flanges**
- ◆ **Compact, light-weight design**
- ◆ **Resists stray magnetic fields**
- ◆ **Comprehensive test data**
- ◆ **Low insertion loss**

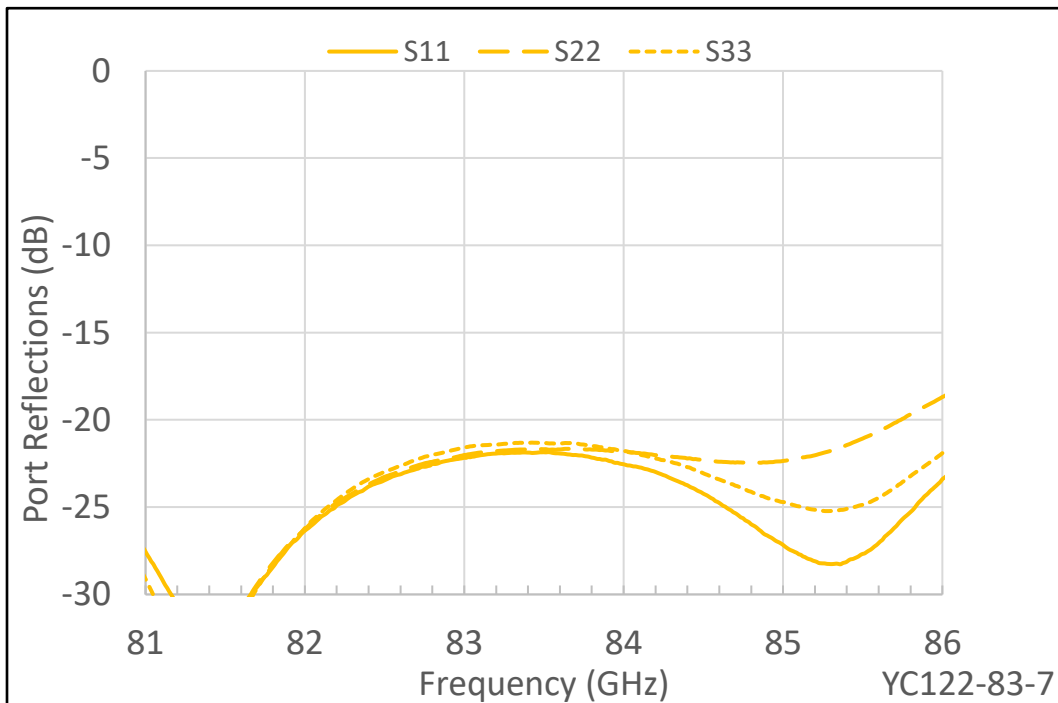




## Insertion Loss and Isolation

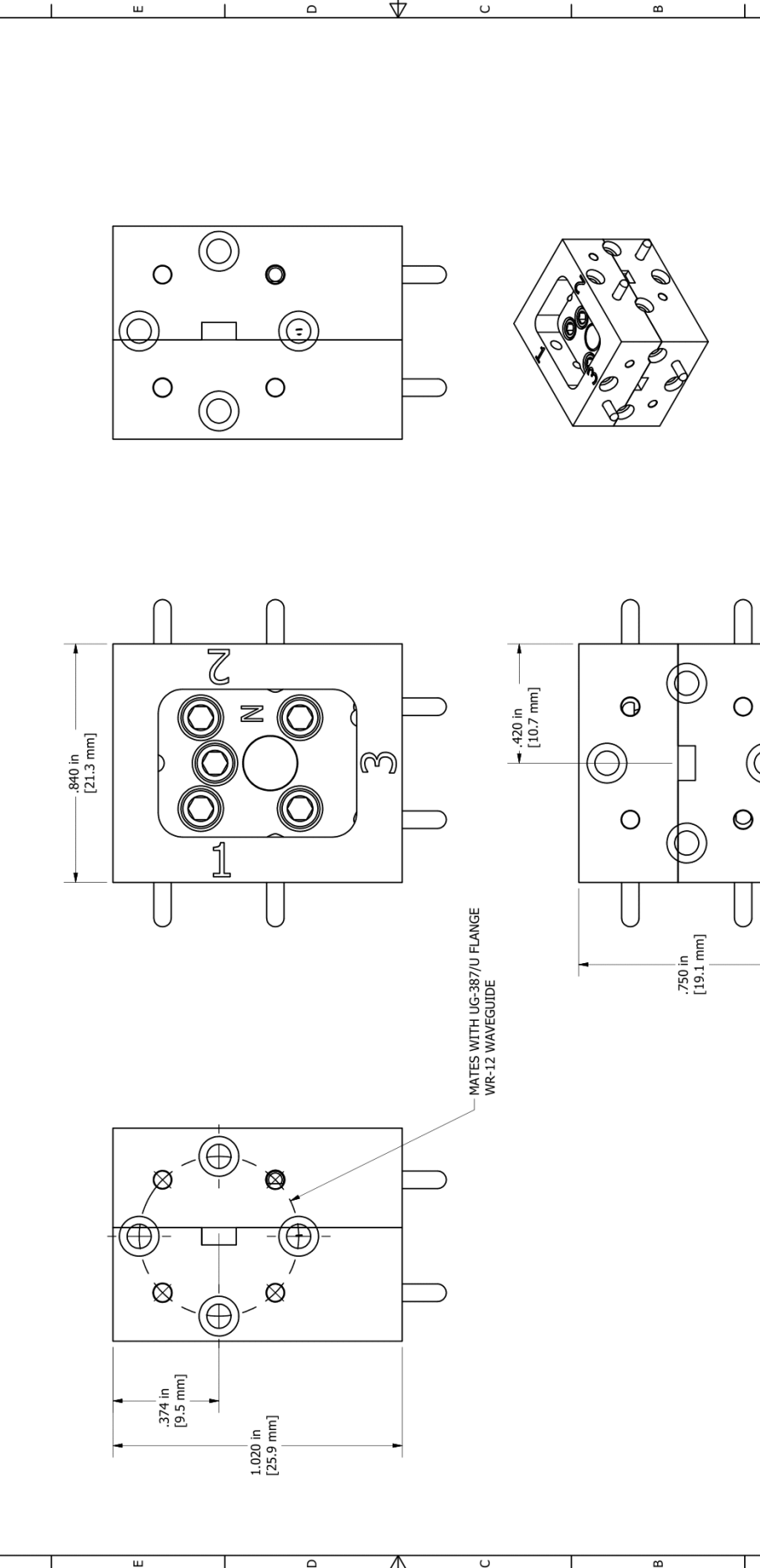


## Port Reflections



Micro Harmonics	Proprietary - Micro Harmonics Corporation		REVISION HISTORY		DATE	APPROVED
	Date	9/13/2023	ZONE	REV		
					RELEASE TO CUSTOMER	MK

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PART NUMBER - DESCRIPTION		Micro Harmonics Corporation	
YC122-83 Dimension Drawing		20 S Roanoke St. Ste 202	
DWG. UNITS: DRAWN BY:		Fincastle, VA 24090	
INCHES	SCS	SIZE:	1 of 1
APPROVAL		ph. 540.473.9983	
		fax 844.449.1561	
		REV:	

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