

# YC100-105

WR-10 Y-junction circulator



**MicroHarmonics**

*Superior mm-Wave Components*

## WR-10 Y-Junction Circulator

103-107 GHz Bandwidth

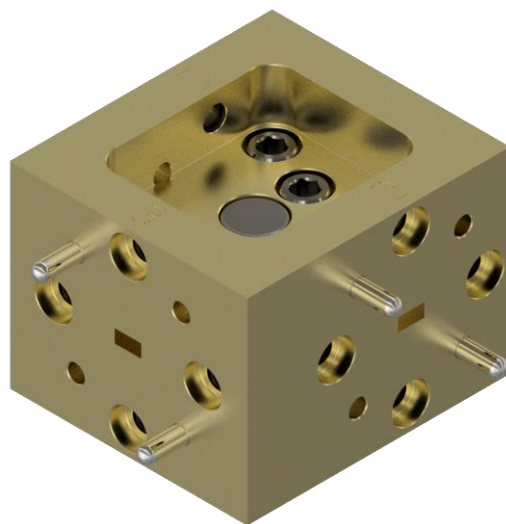
### Specifications

Flange	WR-10 UG-387/UM
Frequency (GHz)	103-107
Insertion Loss (dB, avg)	0.5
Insertion Loss (dB, max)	0.9
Isolation (dB, min)	18
Return Loss (dB, typ min)	21
VSWR (typ max)	1.2:1
Maximum Power (W)	3.0

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.

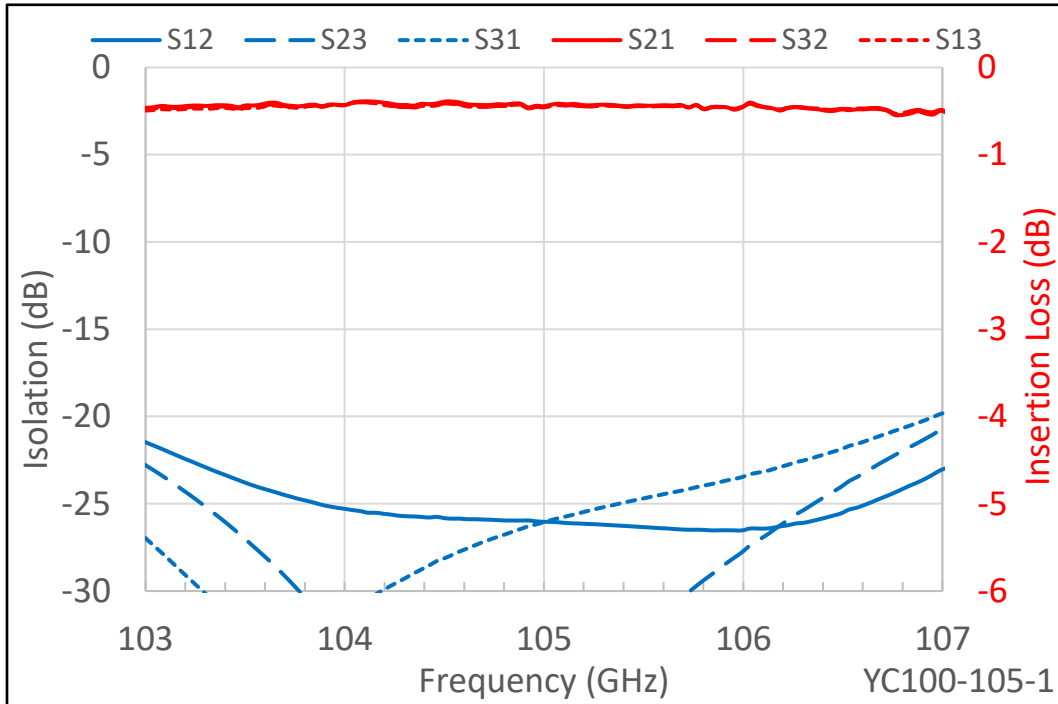
All impedance matching is done through precision machining of the internal waveguide structures. No complicated dielectric elements are used. This approach yields a more repeatable and symmetric response between the three circulator ports. The three ports are equidistant from the ferrite disc.

- ◆ **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**

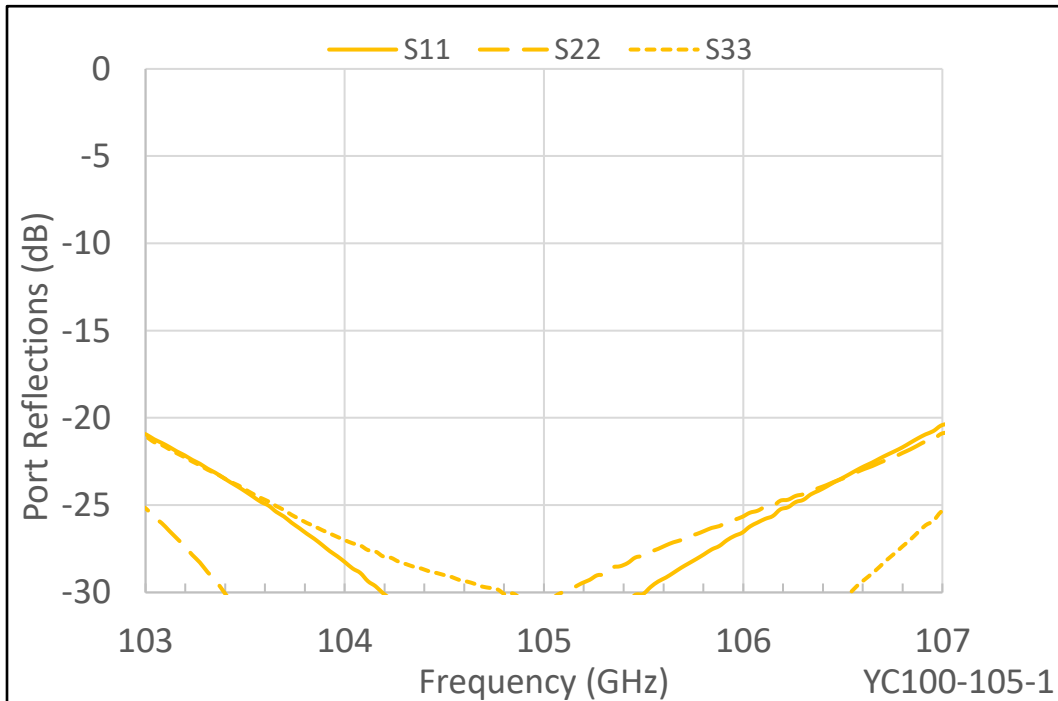




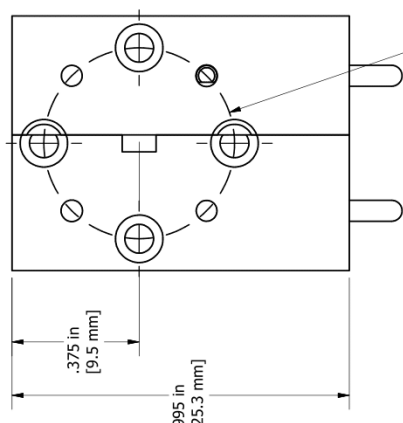
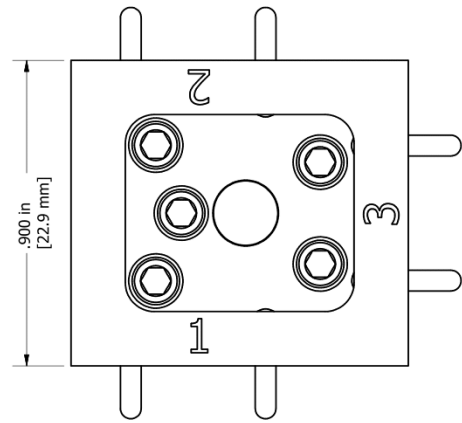
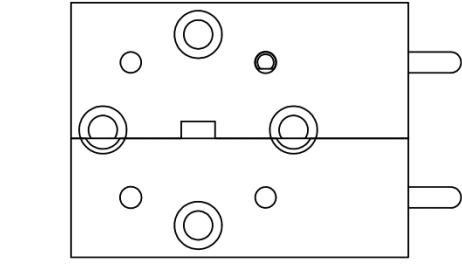
## Insertion Loss and Isolation



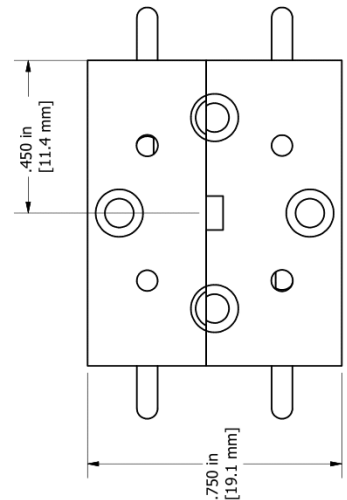
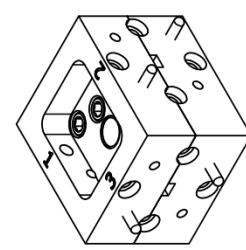
## Port Reflections



8	Proprietary - Micro Harmonics Corporation		REVISION HISTORY		1
	Date 9/13/2023		ZONE	REV	
			DESCRIPTION		APPROVED
			RELEASE TO CUSTOMER		10/3/23
					MK



MATES WITH UG-387/UJM FLANGE  
WR-10 WAVEGUIDE



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