

YC80-118

WR-8 Y-junction circulator



MicroHarmonics

Superior mm-Wave Components

WR-8 Y-Junction Circulator

115-120 GHz Bandwidth

Specifications

Flange	WR-8 UG-387/UM
Frequency (GHz)	115-120
Insertion Loss (dB, avg)	0.8
Insertion Loss (dB, max)	1.3
Isolation (dB, min)	18
Return Loss (dB, typ min)	17
VSWR (typ max)	1.3:1
Maximum Power (W)	3.0

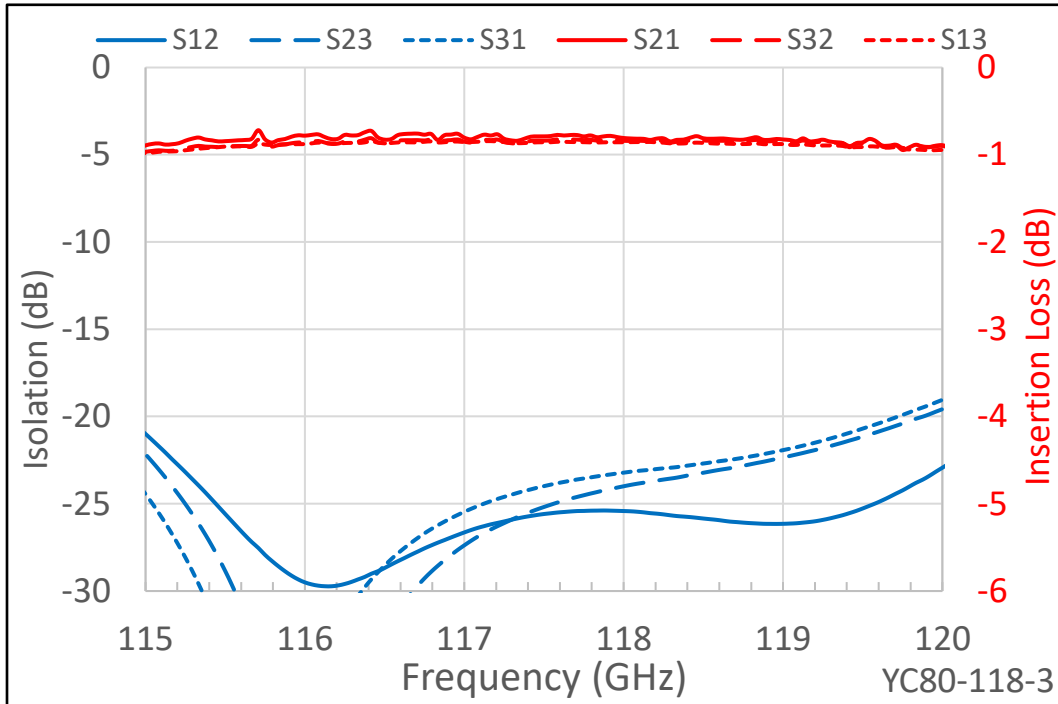
Y-junction circulators are a good solution in applications with moderate to low bandwidth requirements. Peak isolation and minimum port reflections naturally occur in the same part of the band yielding optimum performance.

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.

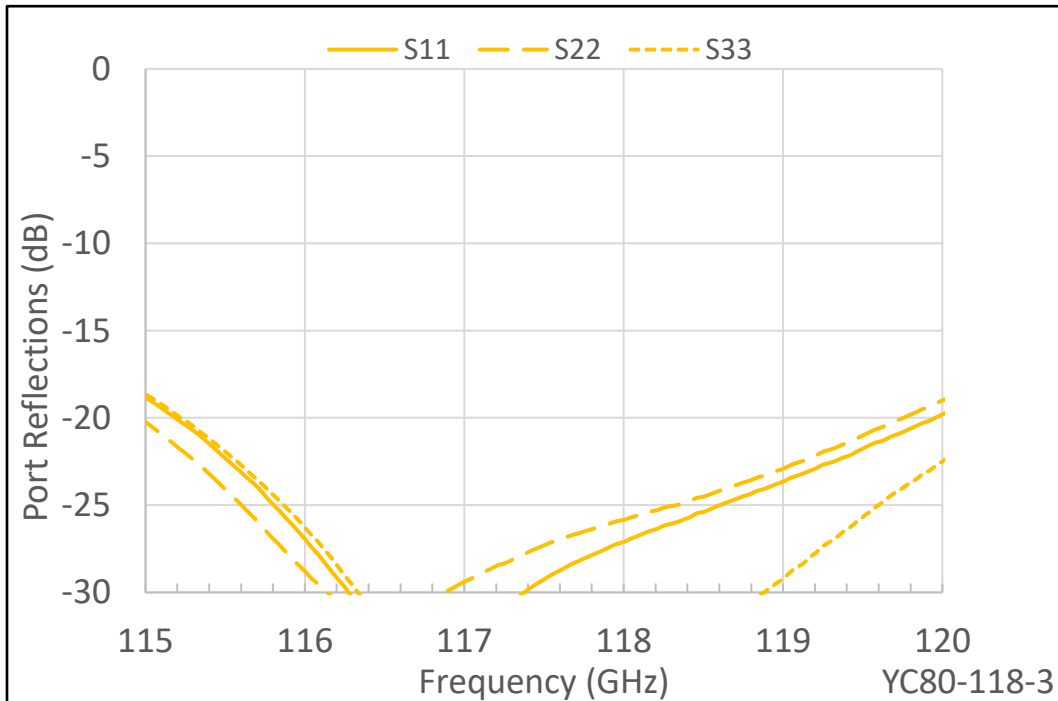
- ◆ **Widest bandwidth for Y-junction**
- ◆ **Internal waveguide screw access**
- ◆ **Anti-cocking waveguide flanges**
- ◆ **Compact, light-weight design**
- ◆ **Resists stray magnetic fields**
- ◆ **Comprehensive test data**
- ◆ **Low insertion loss**



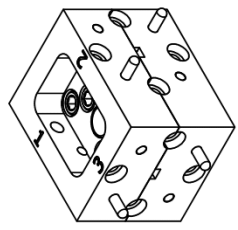
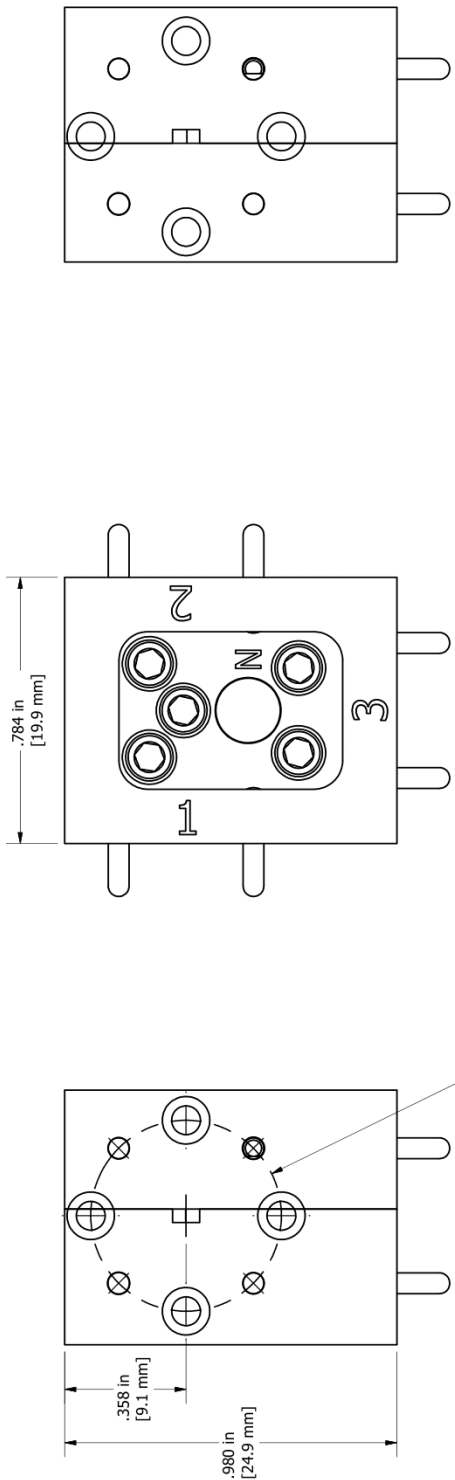
Insertion Loss and Isolation



Port Reflections



8	Micro Harmonics		Proprietary - Micro Harmonics Corporation		7		
	Date		9/7/2023		1		
F	ZONE	REV	REVISION HISTORY		DATE	APPROVED	
			DESCRIPTION				10/4/2023
		RELEASE TO CUSTOMER					



PART NUMBER - DESCRIPTION		YC80-118 Dimension Drawing	
DWG. UNITS: DRAWN BY:		SIZE: PAGE NUMBER:	
INCHES SCS		B 1 of 1	
APPROVAL			

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