

# Data Sheet

## DC618IC20

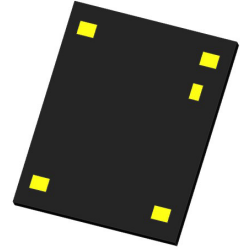
### Directional Coupler

### 6 GHz-18 GHz



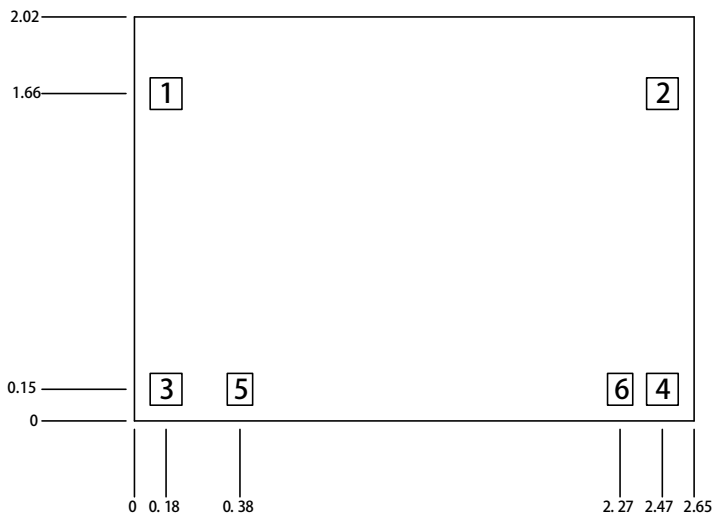
## Features

- Very Low Loss
- Wideband, 6 to 18 GHz
- Excellent coupling flatness  $20\pm 2$  dB typ.
- Highly repeatable performance (GaAs based design)



## Applications

- Satellite communications
- Wireless infrastructure
- Test and measurements



PAD1、2、3、4尺寸是0.15\*0.15  
PAD5、6尺寸是0.15\*0.12

Die dimensions in mm

Function	Pad Number			
INPUT	1	2	3	4
COUPLED	3	4	1	2
DIRECT	2	1	4	3
ISO	4	3	2	1
当PAD3作为ISO时，可以选择键合到内部PAD5				
当PAD4作为ISO时，可以选择键合到内部PAD6				

## Notes:

- 1.Require to add Capacitors of DC Blocker between Pins(with black color) and external circuit to prevent DC signal entry to guranteeparts normal work.
- 2.This part has passed through 100% RF test.

## Yantel Corporation

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#### Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		6000		18000	MHz
Mainline Loss	6000 - 8000		0.4		dB
	8000 - 10000		0.7		
	10000 - 15000		0.8		
	15000 - 18000		0.9		
Nominal Coupling	6000 - 8000		22		dB
	8000 - 10000		21		
	10000 - 15000		21		
	15000 - 18000		21		
Coupling Flatness(±)	6000 - 18000		2.0		dB
Directivity	4000 - 8000		21		dB
	8000 - 10000		19		
	10000 - 15000		16		
	15000 - 18000		14		
Return Loss (Input)	6000 - 8000		26		dB
	8000 - 10000		16		
	10000 - 15000		17		
	15000 - 18000		21		
Return Loss (Output)	6000 - 8000		26		dB
	8000 - 10000		16		
	10000 - 15000		17		
	15000 - 18000		21		
Return Loss (Coupled)	6000 - 8000		19		dB
	8000 - 10000		16		
	10000 - 15000		15		
	15000 - 18000		21		

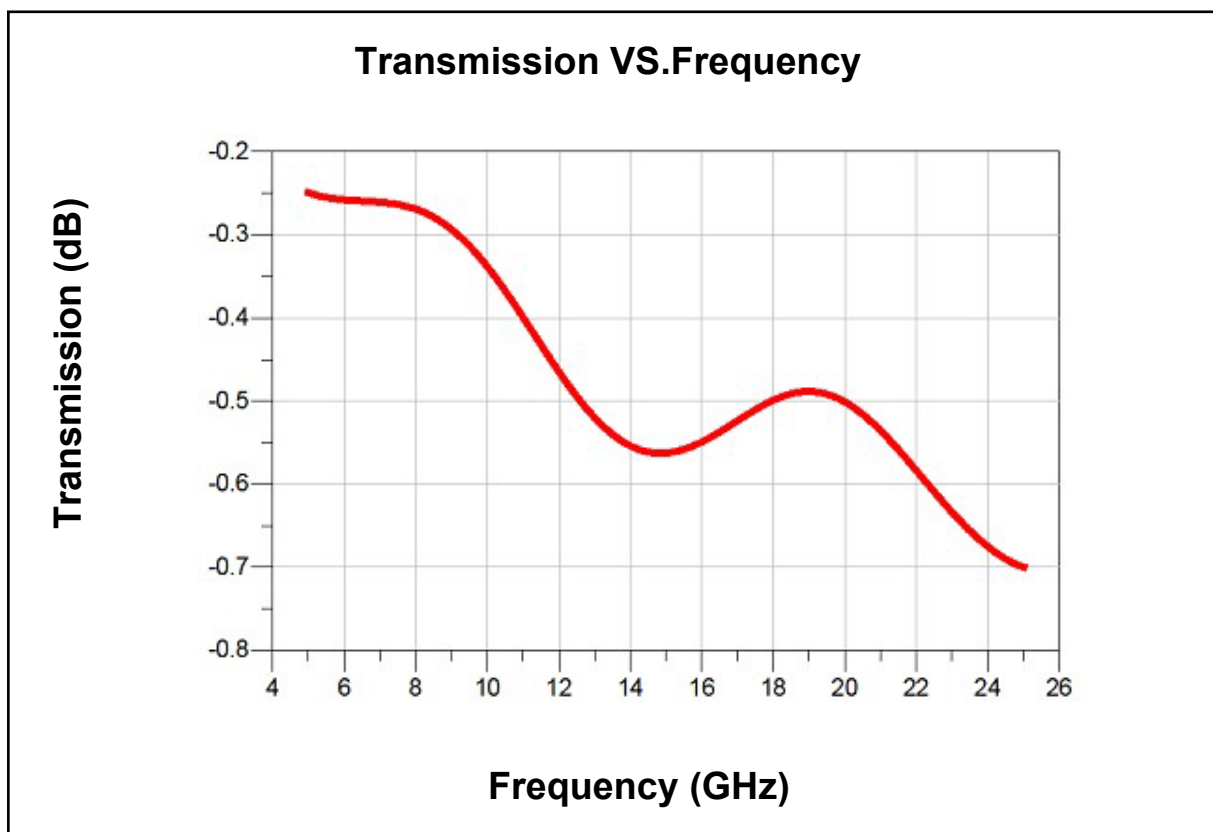
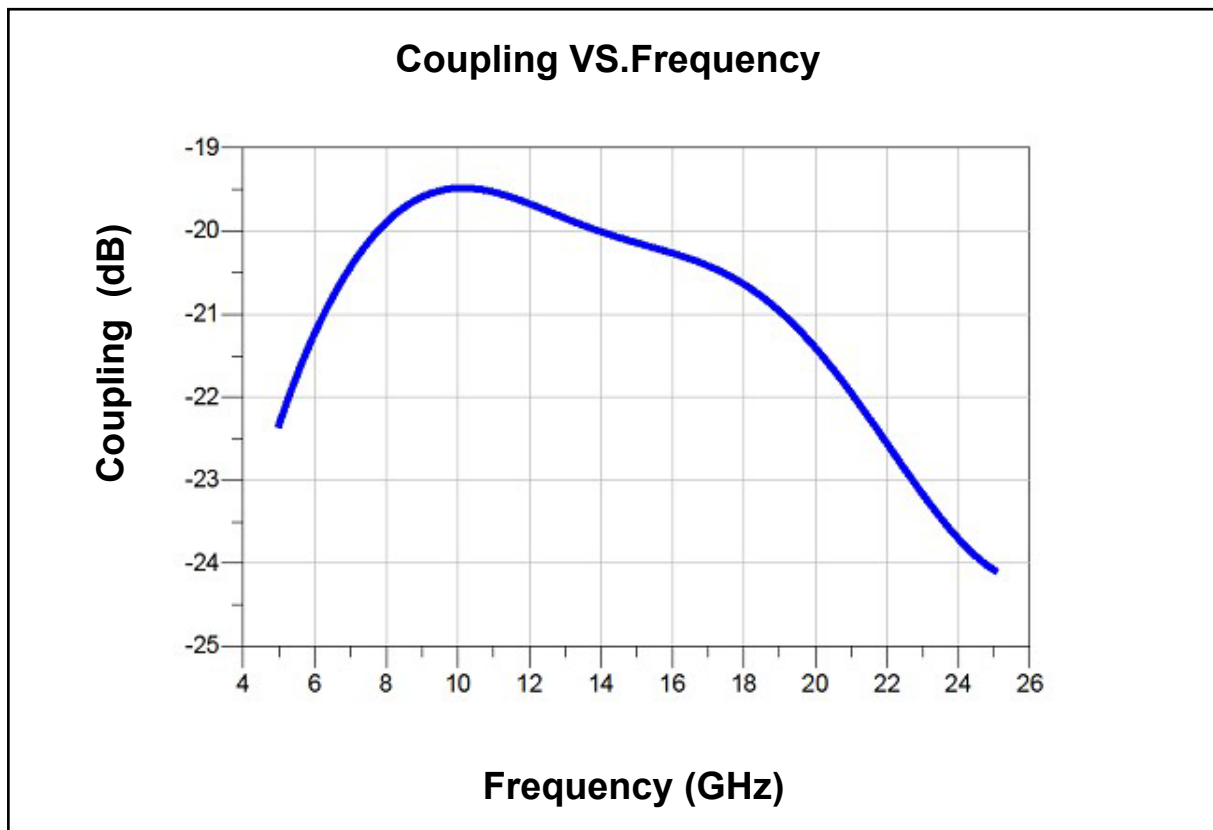
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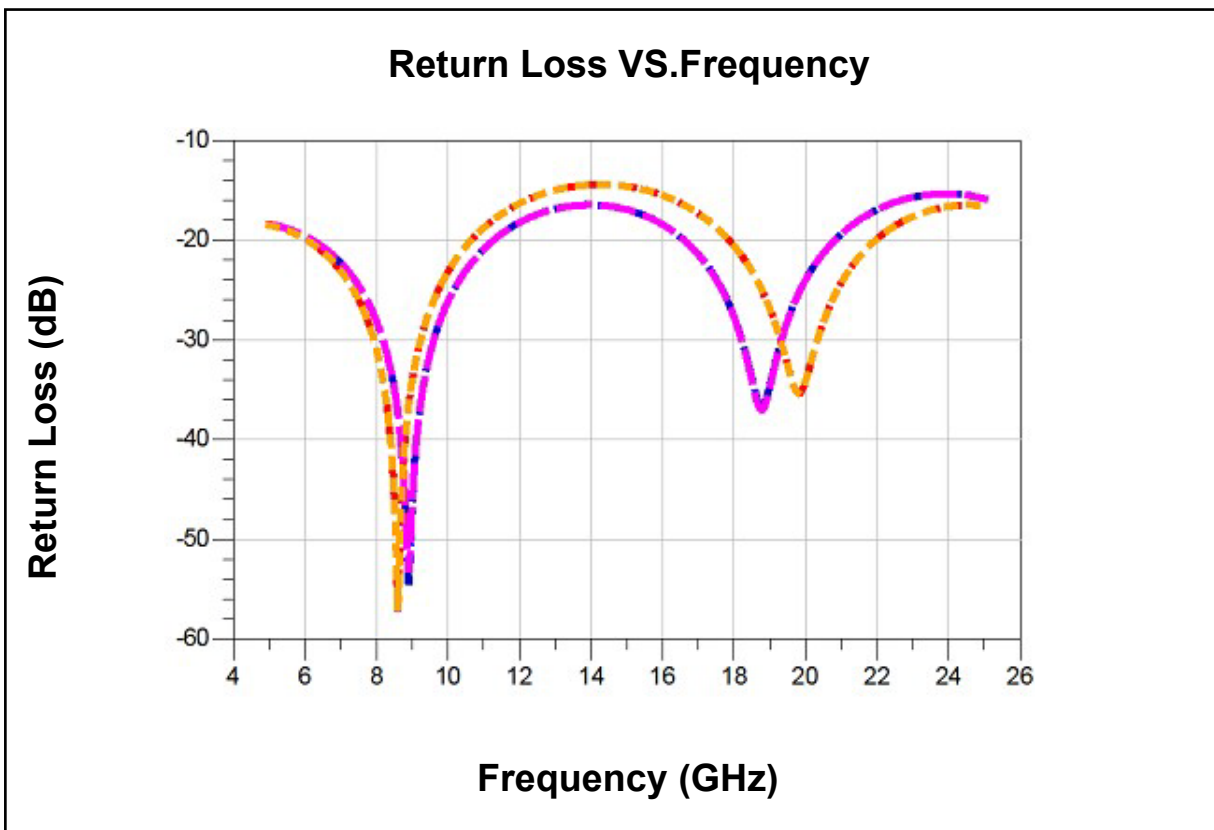
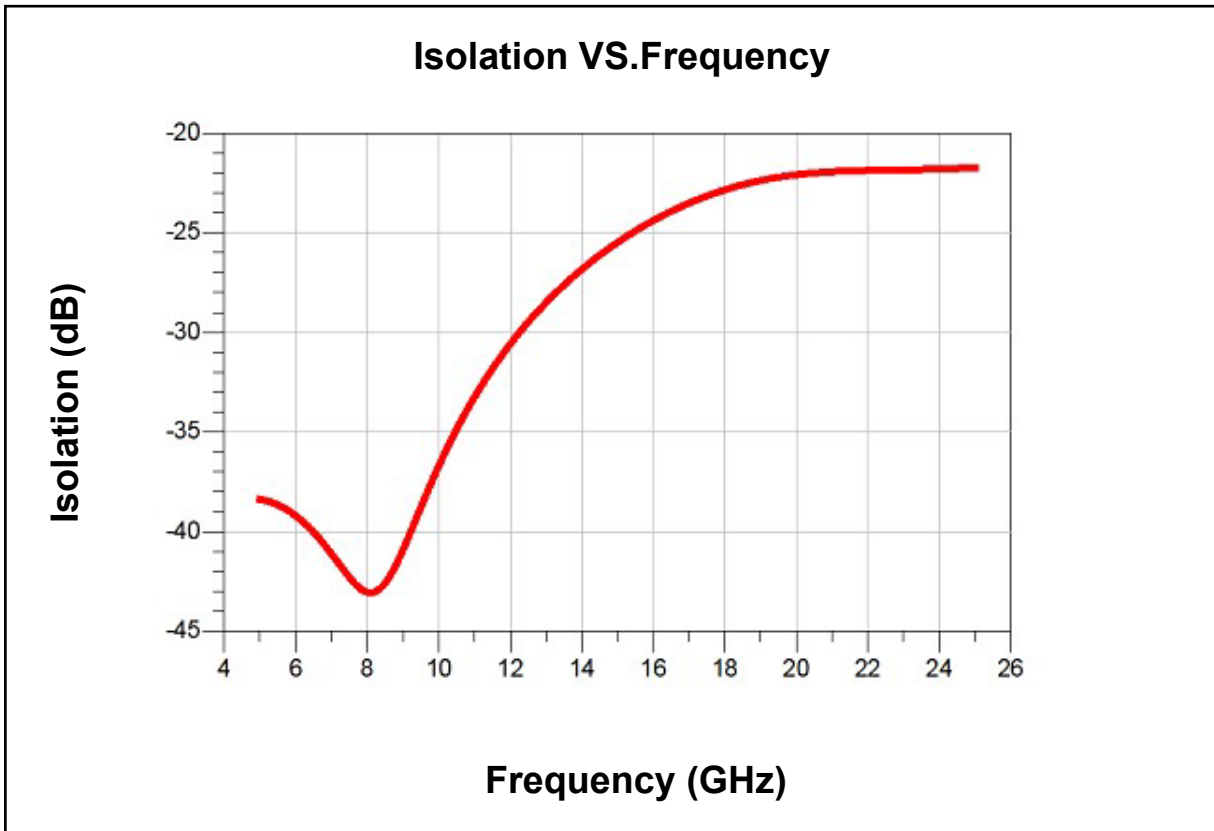
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Directional Coupler  
6 GHz-18 GHz



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