

Data Sheet

DC618IC10

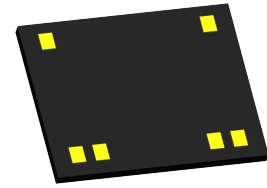
Directional Coupler

6 GHz-18 GHz



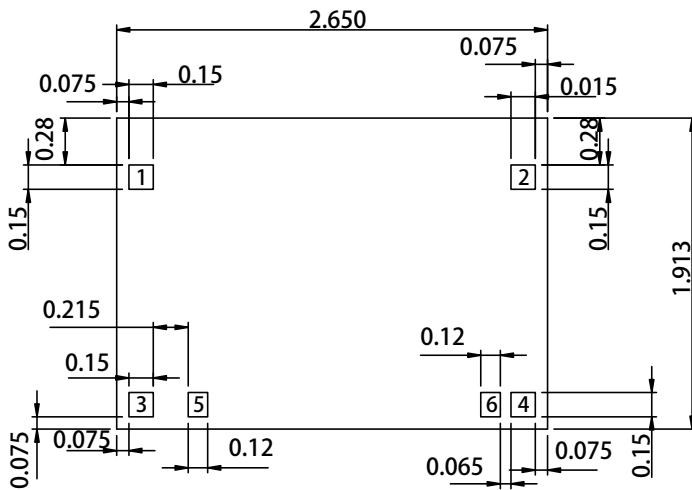
Features

- Very Low Loss
- Wideband, 6 to 18 GHz
- Excellent coupling flatness 10±1.5 dB typ.
- Highly repeatable performance (GaAs based design)



Applications

- Satellite communications
- Wireless infrastructure
- Test and measurements



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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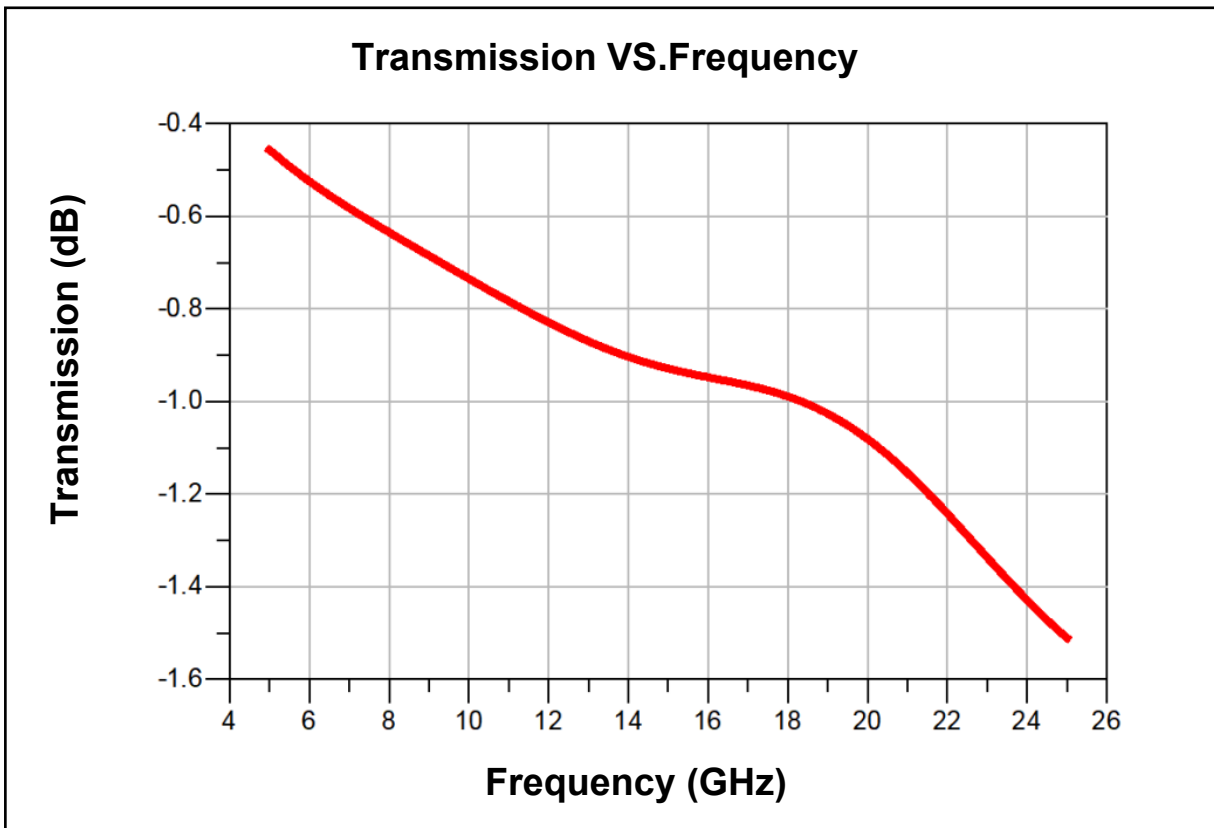
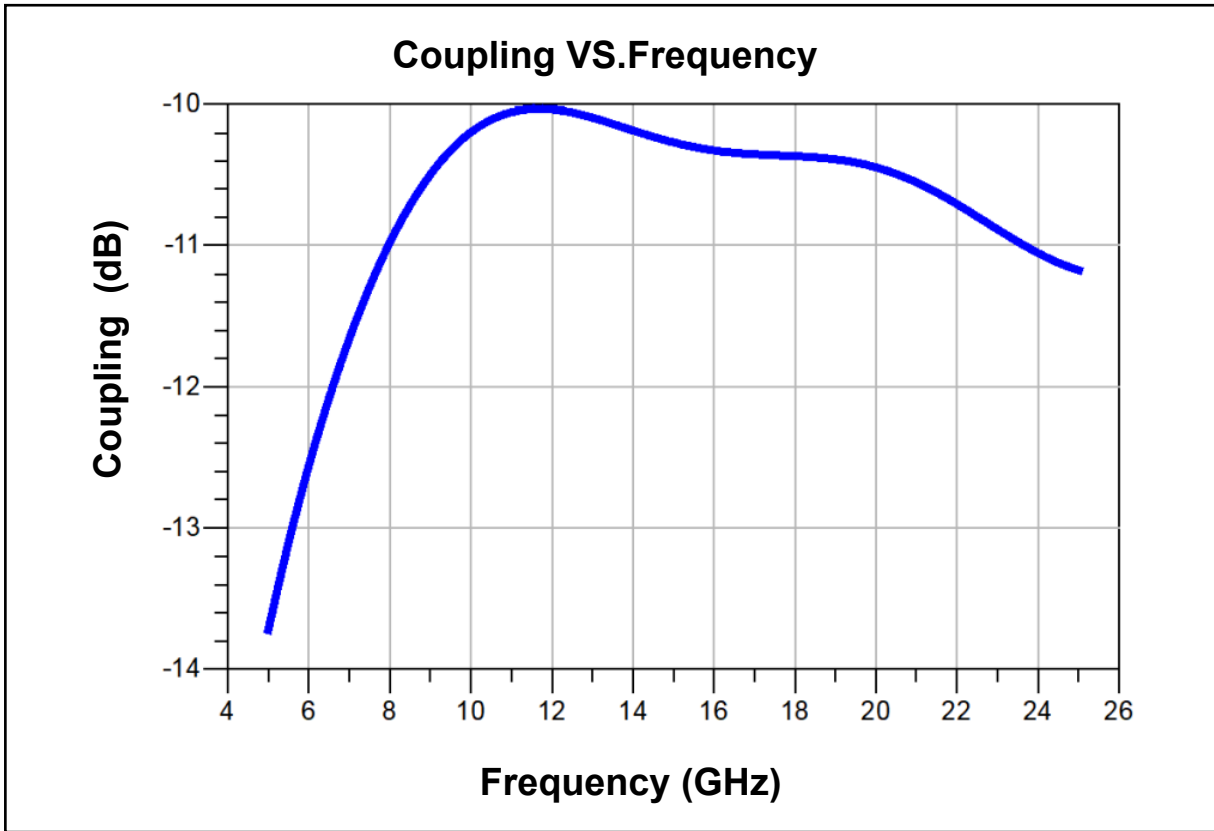
Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		6000		18000	MHz
Mainline Loss	6000 - 10000	—	1.0	2.2	dB
	10000 - 14000	—	1.3	2.3	
	14000 - 16000	—	1.4	2.3	
	16000 - 18000	—	1.5	2.3	
Nominal Coupling	6000 - 10000	9.2	10.3	12.5	dB
	10000 - 14000	9.5	10.0	11.7	
	14000 - 16000	9.7	10.5	11.7	
	16000 - 18000	9.8	10.8	11.9	
Coupling Flatness(±)	6000 - 18000	—	0.7	—	dB
Directivity	6000 - 10000	10	16	—	dB
	10000 - 14000	10	16	—	
	14000 - 16000	9.1	12	—	
	16000 - 18000	8.9	18	—	
Return Loss (Input)	6000 - 10000		24		dB
	10000 - 14000		18		
	14000 - 16000		15		
	16000 - 18000		15		
Return Loss (Output)	6000 - 10000		22		dB
	10000 - 14000		17		
	14000 - 16000		12		
	16000 - 18000		18		
Return Loss (Coupled)	6000 - 10000		24		dB
	10000 - 14000		17		
	14000 - 16000		14		
	16000 - 18000		14		

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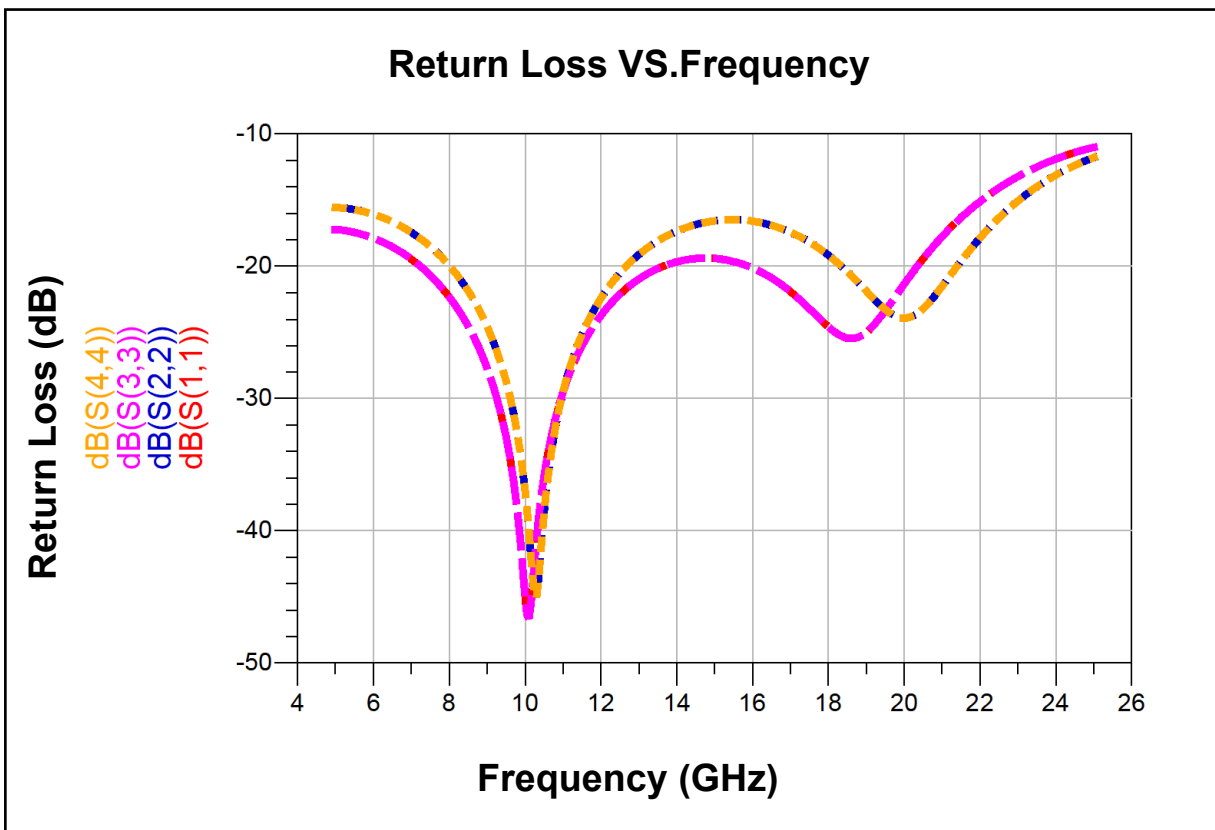
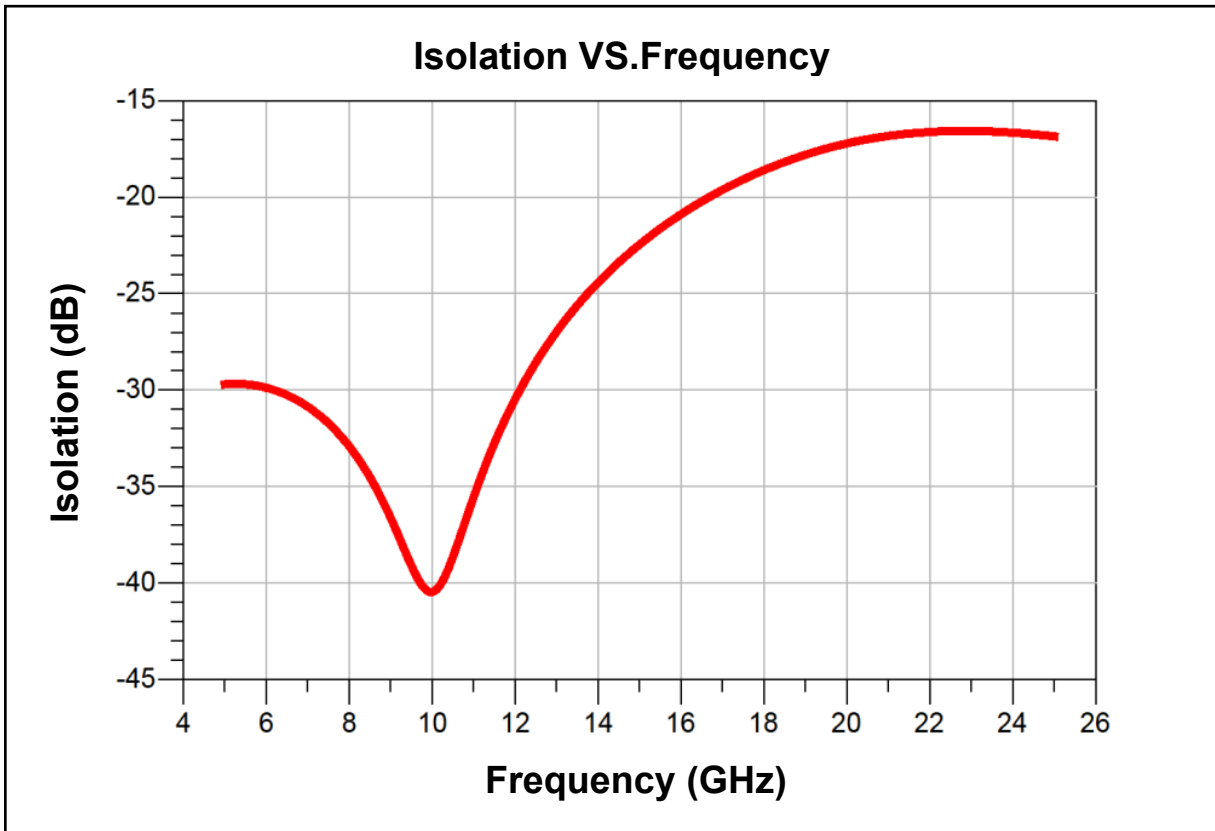
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