

# Data Sheet

## HC26IC03

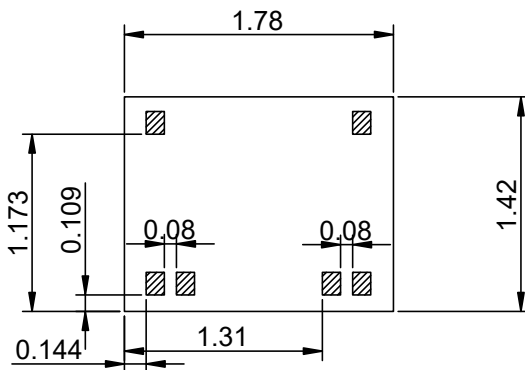
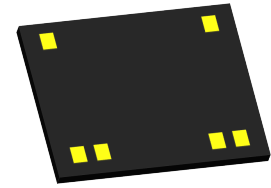
### 90 Degree Hybrid

### 2 GHz-6 GHz



## Features

- Small Size (1.42×1.78mm)
- Very Low Loss
- Tight Amplitude Balance
- High Isolation
- Low VSWR
- Good Repeatability
- Unpackaged die



▨ PAD:0.15x0.12mm

## Applications

- Phase shifter / Attenuator
- Balanced amplifier / LNA configurations
- Modulators
- Mixers
- Power combining /dividing

### 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.

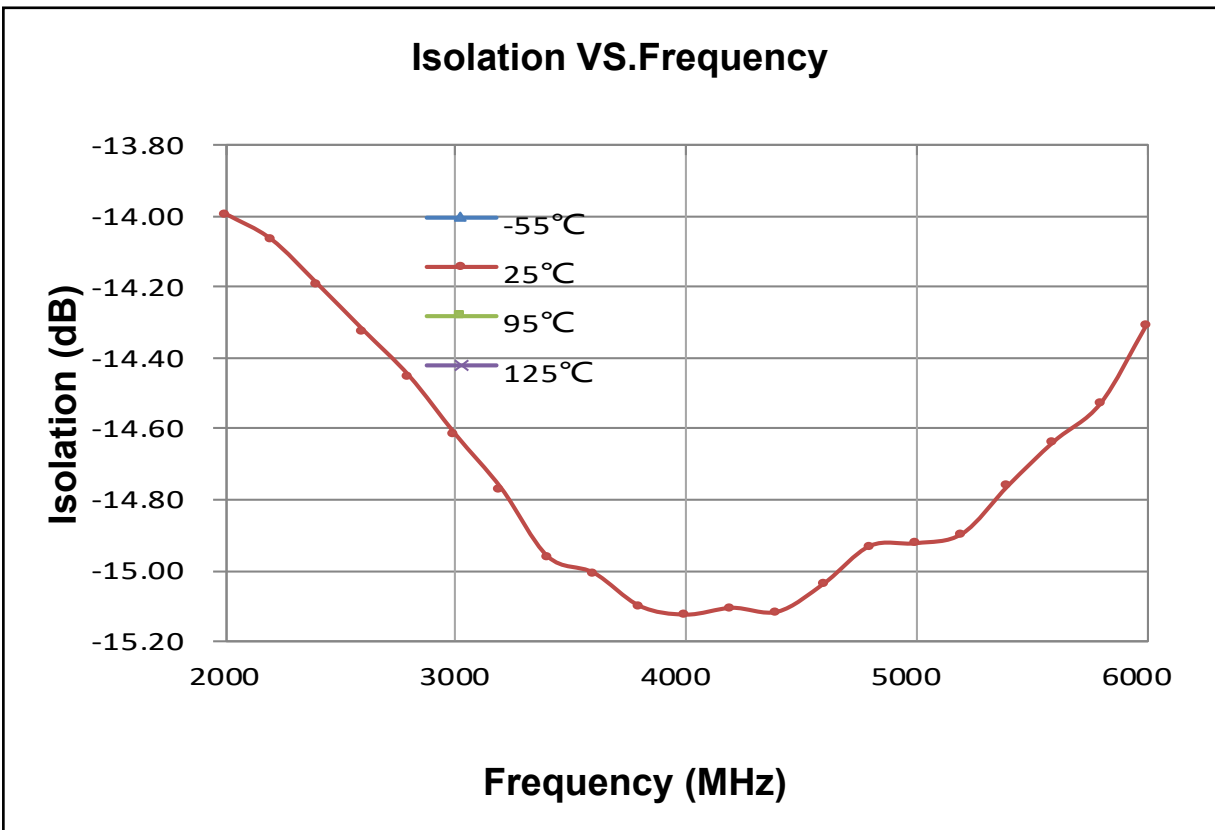
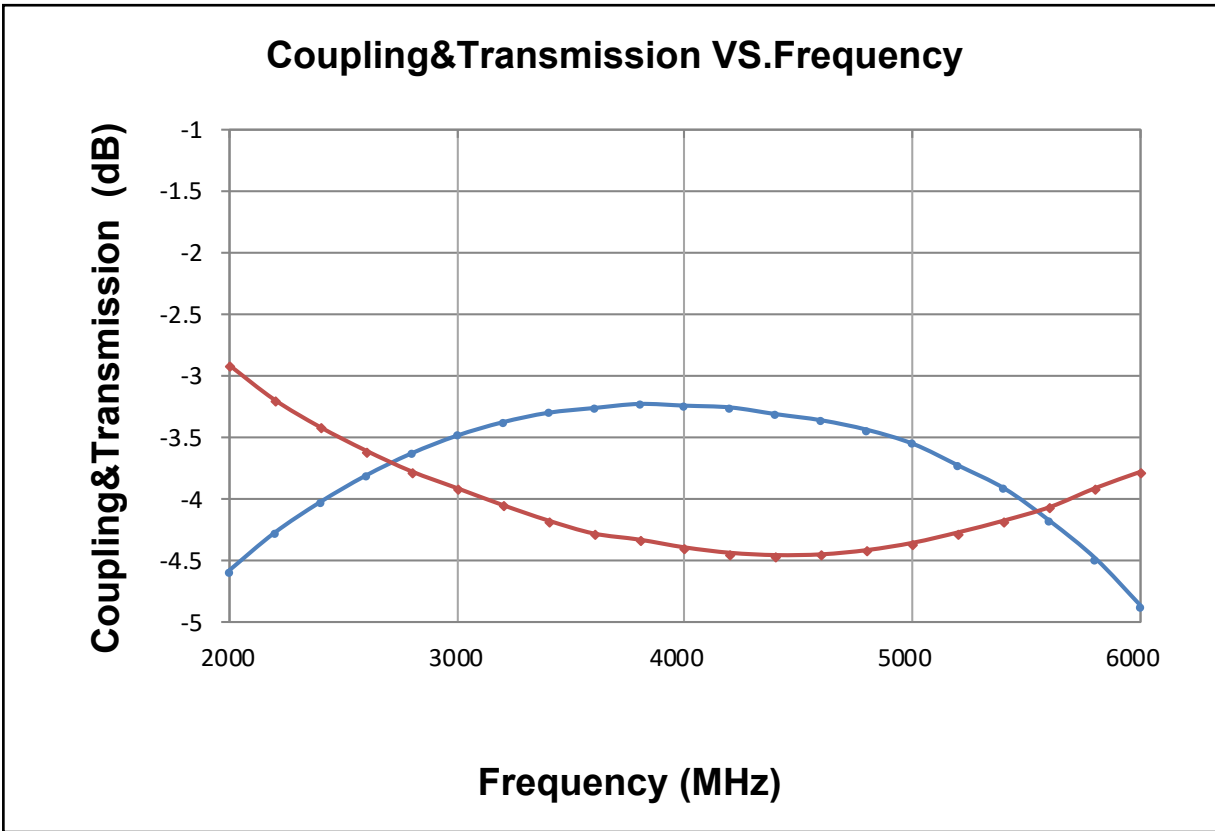
### Electrical Specifications at 25°C

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	F	2		6	GHz
Insertion Loss (Above 3dB)	$I_L$		0.7	1.4	dB
Isolation	$I_{sol}$	12	15		dB
Phase Unbalance (Deviation from 90°)	$\phi_{bal}$		3.0	9.0	deg
Amplitude Unbalance	$A_{bal}$		0.6	1.8	dB
Input VSWR			1.3	1.5	
Output VSWR			1.3	1.5	

## Yantel Corporation

Add: No.308-322, 3F, Building 1, Juchuang Jingu Innovation Park, Wenyuan Road 35, Xili Street, Nanshan, Shenzhen, China  
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

**Data Sheet**  
**HC26IC03**  
 90 Degree Hybrid  
 2 GHz-6 GHz



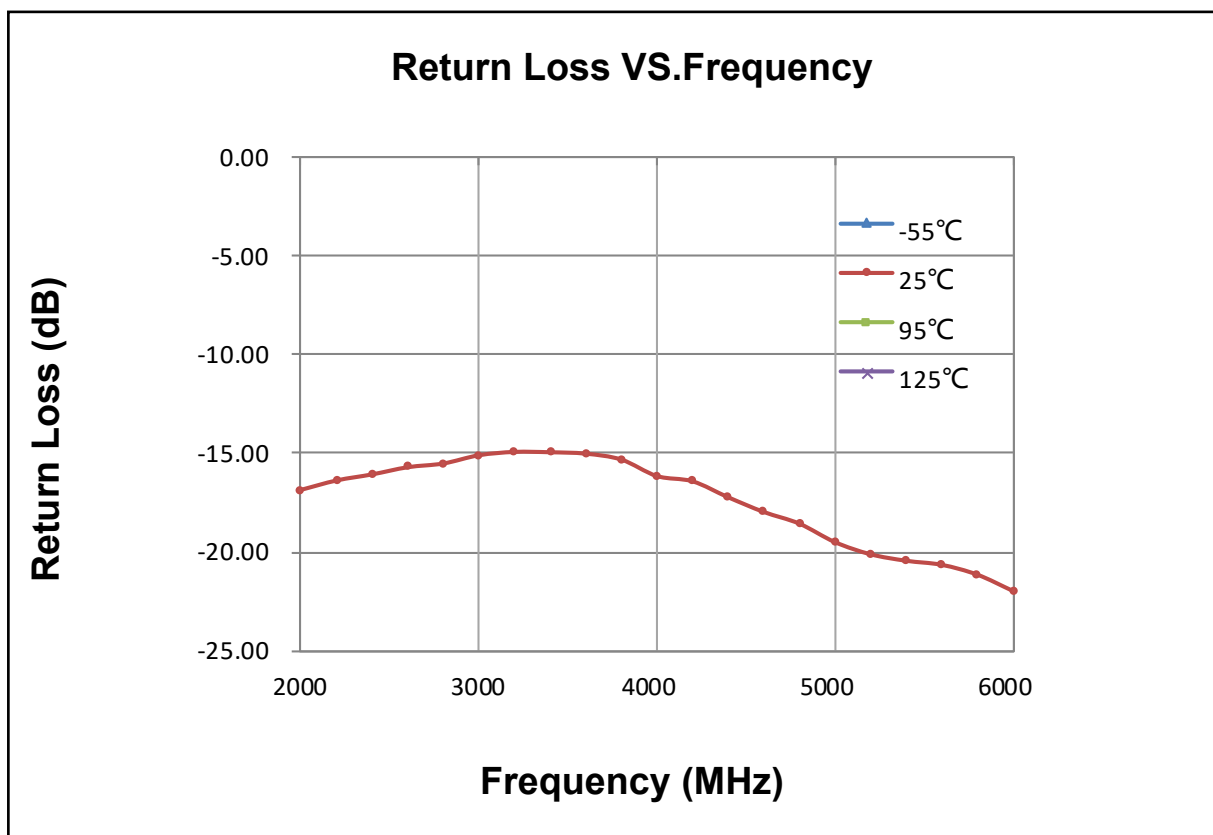
**Yantel Corporation**

Add: No.308-322, 3F, Building 1, Juchuang Jingu Innovation Park, Wenyuan Road 35, Xili Street, Nanshan, Shenzhen, China  
 Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

# Data Sheet

## HC26IC03

90 Degree Hybrid  
2 GHz-6 GHz



### Yantel Corporation

Add: No.308-322, 3F, Building 1, Juchuang Jingu Innovation Park, Wenyuan Road 35, Xili Street, Nanshan, Shenzhen, China  
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

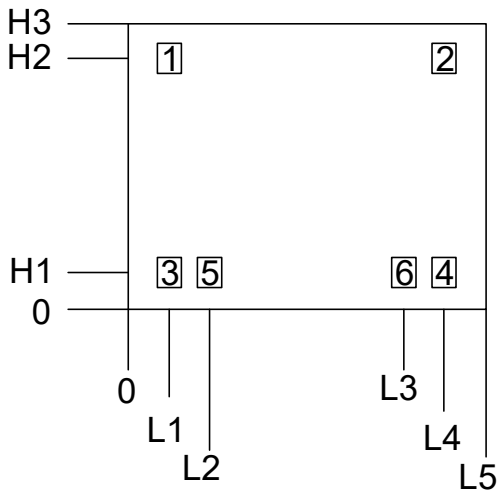
# Data Sheet

## HC26IC03

90 Degree Hybrid  
2 GHz-6 GHz



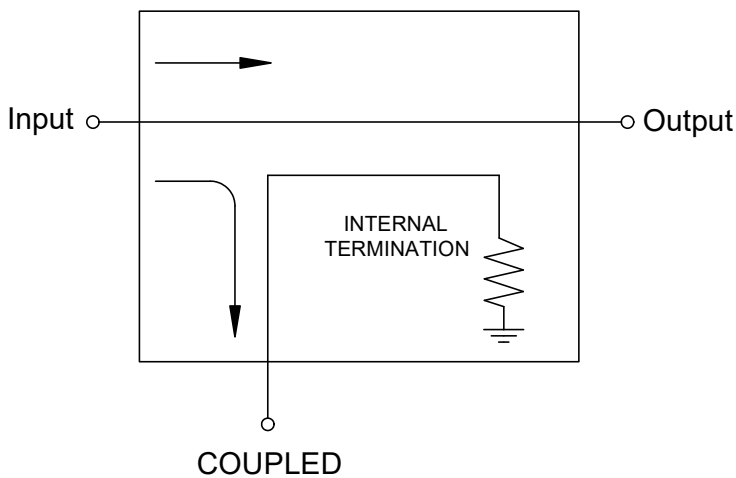
### Outline Drawing



Die dimensions in  $\mu\text{m}$

L1	L2	L3	L4	L5	H1	H2	H3
204	404	1370	1570	1780	184	1248	1420
Thickness		Die size		Bond pad Size			
100		1780x1420		120x150			

### Simplified Schematic and Pad description



Pad#	Function	Function
1	Input	Output
2	Output	Input
3	Coupled	Isolated
4	Isolated	Coupled
5	50ohm	50ohm
6	50ohm	50ohm
Die Bottom	Ground	Ground

### Yantel Corporation

Add: No.308-322, 3F, Building 1, Juchuang Jingu Innovation Park, Wenyuan Road 35, Xili Street, Nanshan, Shenzhen, China  
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533