

# Data Sheet

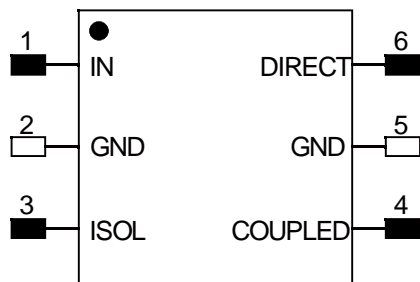
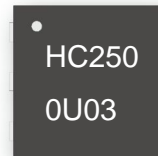
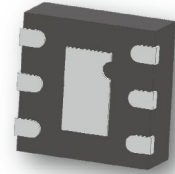
## HC2500U03-050

90 Degree Hybrid  
2.30 GHz-2.65 GHz



### Features

- Small Size (2x2mm)
- Very Low Loss
- Tight Amplitude Balance
- High Isolation
- Low VSWR
- Good Repeatability
- Tape & Reel
- Power handling
  - 4 Watts as a divider
  - 2 Watts as a combiner



TOP VIEW

### 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	2300		2650	MHz
Insertion Loss (Above 3dB)	$I_L$		0.35	0.5	dB
Isolation	Isol	20	24		dB
Phase balance	$\varnothing_{bal}$		1.0	2.0	deg
Amplitude balance	$A_{bal}$		0.5	1.0	dB
Return Loss	$R_L$	18	22		dB

### Yantel Corporation

Add: 3F, Building 3, Southern District 2 of Zhongguan Honghualing Industrial Park, Xili, Nanshan, Shenzhen, China  
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

Rev A3

For detailed performance specs & shopping online see Yantel web site : [www.yantel-corp.com](http://www.yantel-corp.com)

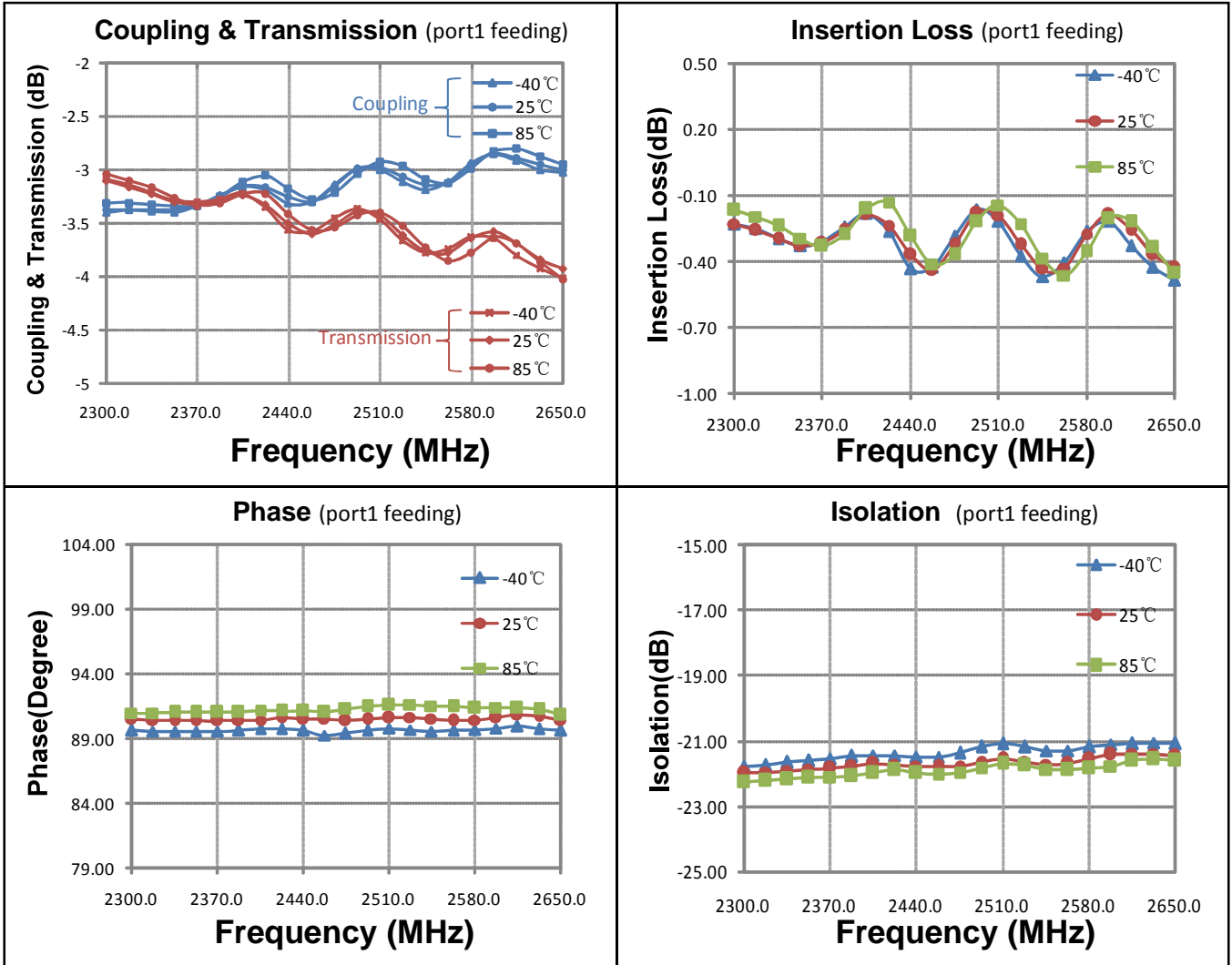
# Data Sheet

## HC2500U03-050

90 Degree Hybrid  
2.30 GHz-2.65 GHz



### Typical Performance (-40°C, 25°C, 85°C: 2.30-2.65 GHz)



### Yantel Corporation

Add: 3F, Building 3, Southern District 2 of Zhongguan Honghualing Industrial Park, Xili, Nanshan, Shenzhen, China  
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

Rev A3

For detailed performance specs & shopping online see Yantel web site : [www.yantel-corp.com](http://www.yantel-corp.com)

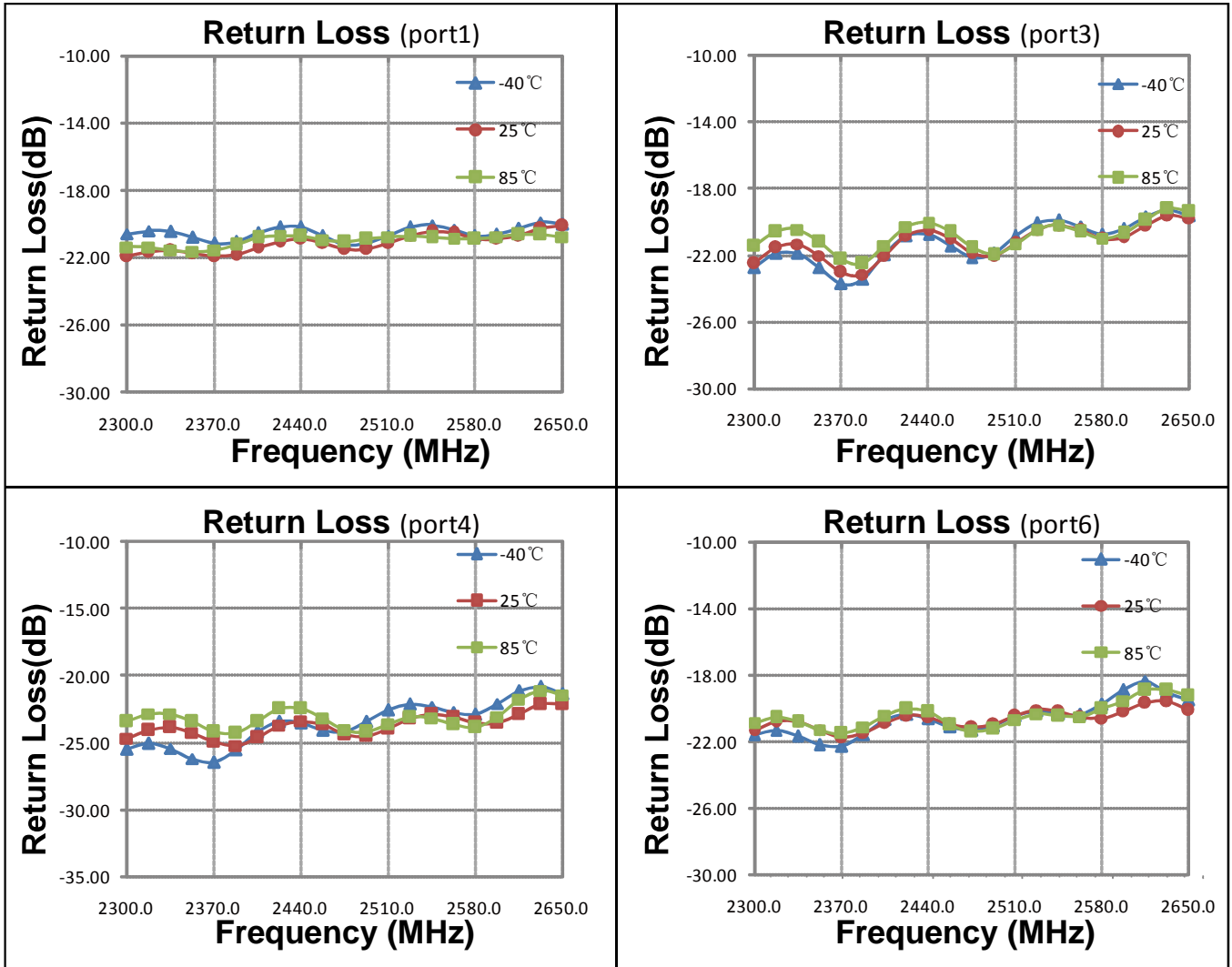
# Data Sheet

## HC2500U03-050

90 Degree Hybrid  
2.30 GHz-2.65 GHz



Typical Performance (-40°C, 25°C, 85°C: 2.30-2.65 GHz)



### Yantel Corporation

Add: 3F, Building 3, Southern District 2 of Zhongguan Honghualing Industrial Park, Xili, Nanshan, Shenzhen, China  
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

Rev A3

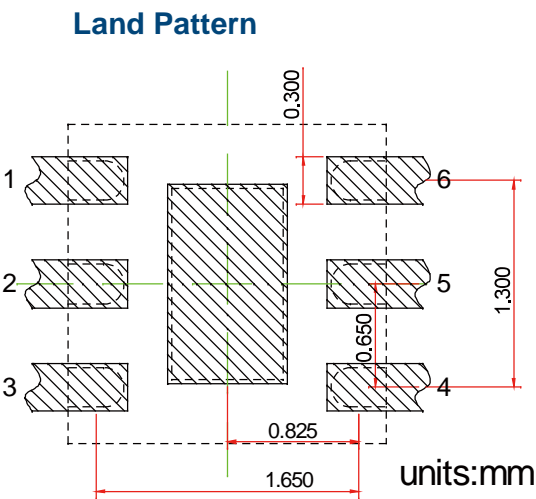
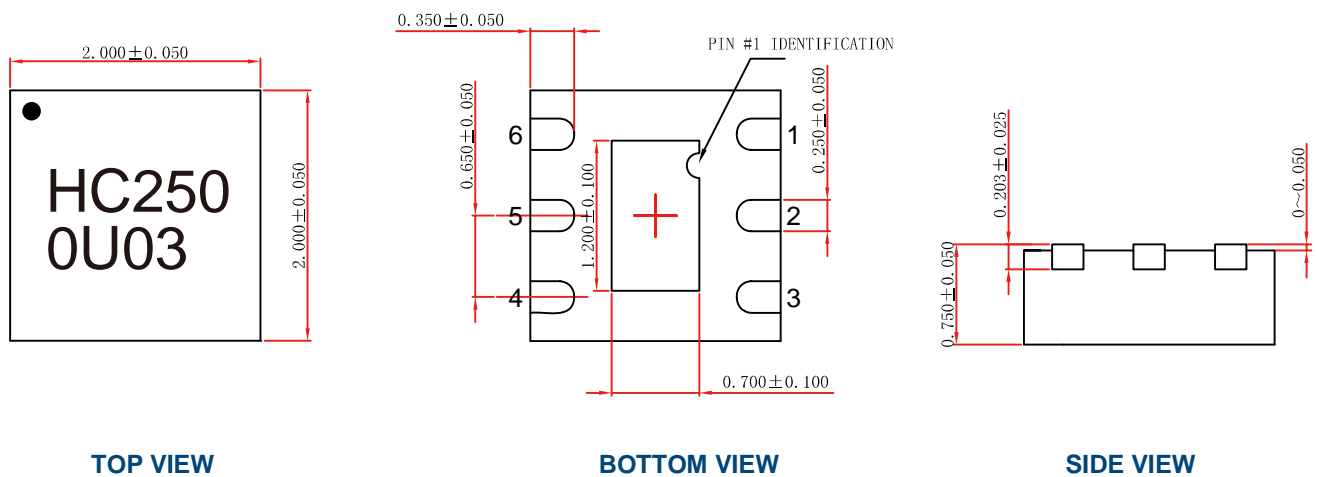
For detailed performance specs & shopping online see Yantel web site : [www.yantel-corp.com](http://www.yantel-corp.com)

# Data Sheet HC2500U03-050

90 Degree Hybrid  
2.30 GHz-2.65 GHz

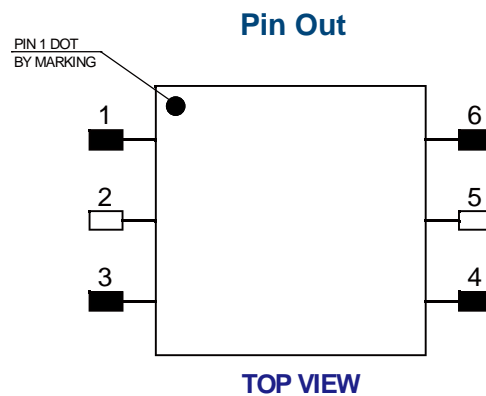


## Outline Drawing



## Recommended Land Pattern Top View

Notes: All dimensions show in millimeters



Notes:

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

Pin #	Connection
1	IN
2	GND
3	ISOL
4	COUPLED
5	GND
6	DIRECT

## Yantel Corporation

Add: 3F, Building 3, Southern District 2 of Zhongguan Honghualing Industrial Park, Xili, Nanshan, Shenzhen, China  
 Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

Rev A3

For detailed performance specs & shopping online see Yantel web site : [www.yantel-corp.com](http://www.yantel-corp.com)