

Data Sheet

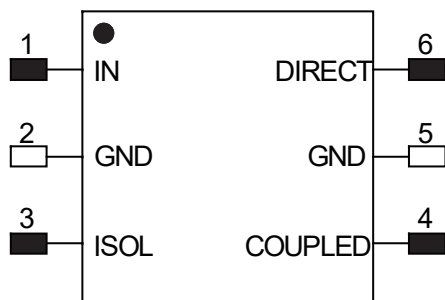
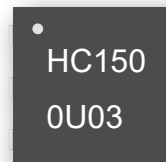
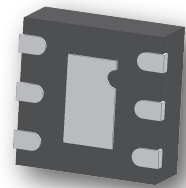
HC1500U03

3dB 90° Coupler IC
12GHz-18GHz



Features

- Small Size (2×2mm)
- 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	12		18	GHz
Insertion Loss (Above 3dB)	I_L		0.75	0.90	dB
Isolation	Isol	12.5	13.5		dB
Phase balance	$\varnothing_{bal}$		5	6	deg
Amplitude balance	A_{bal}		0.5	0.65	dB
Return Loss	R_L	13	15		dB

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

Rev A1.0

For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com

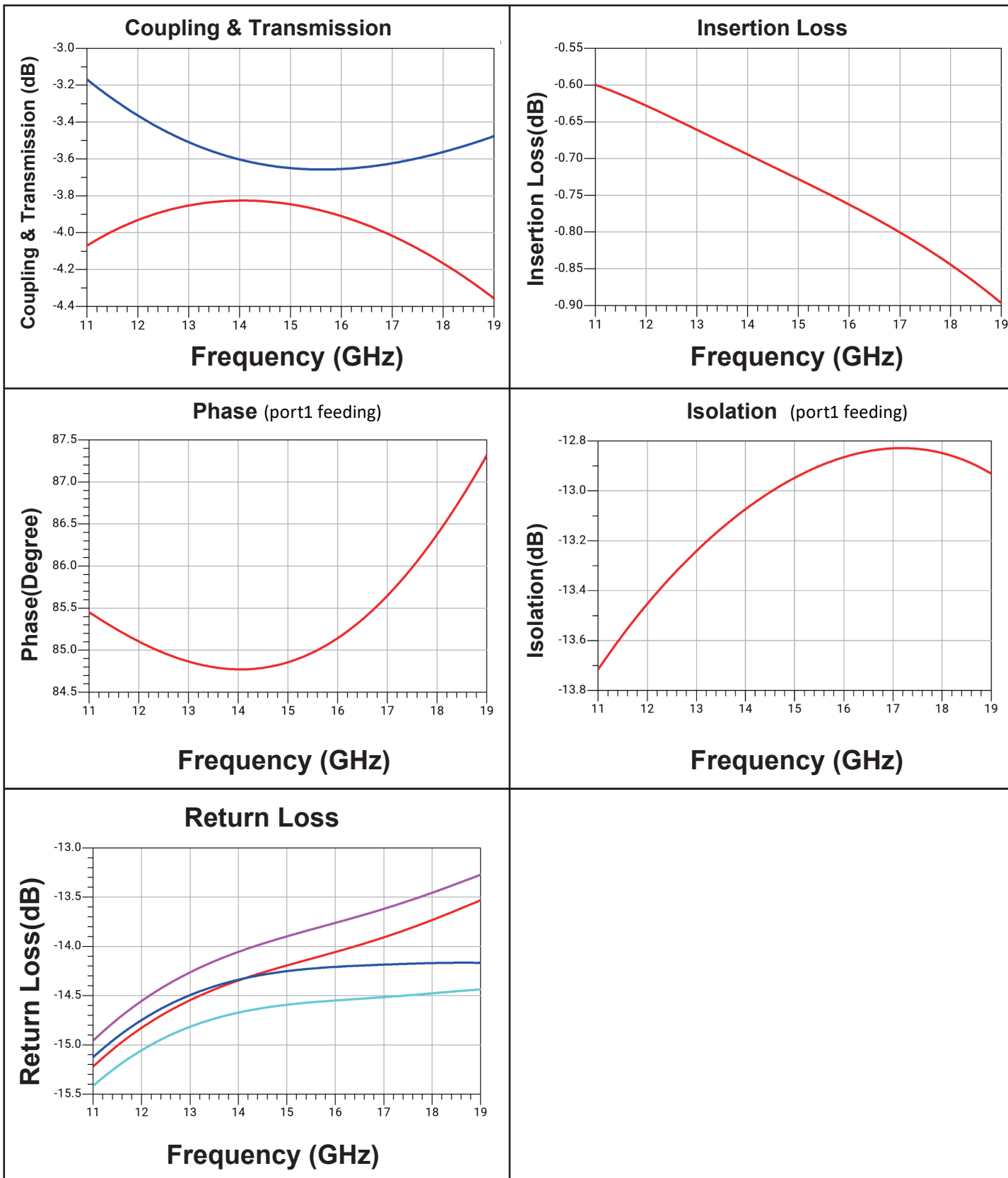
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Typical Performance (25°C: 12-18GHz)



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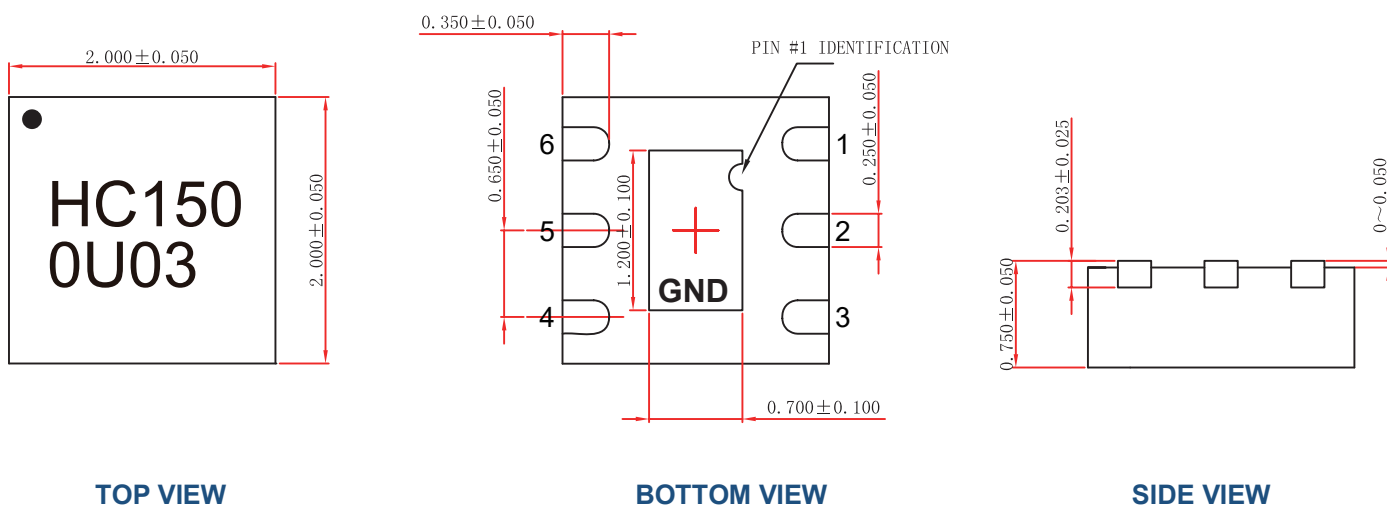
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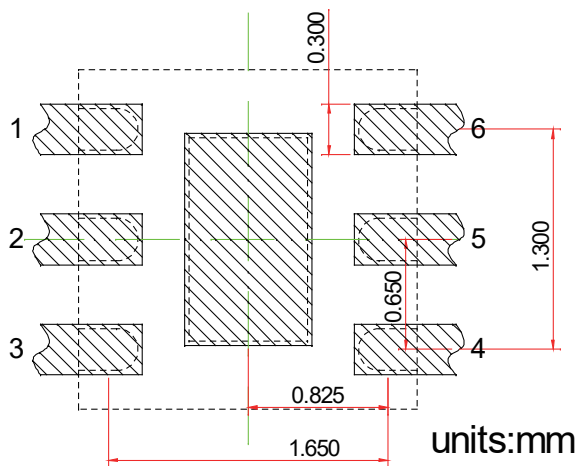
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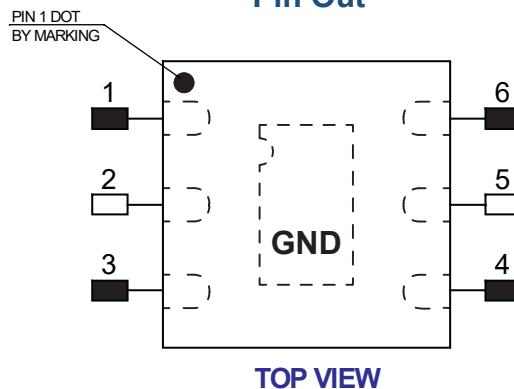
Outline Drawing



Land Pattern



Pin Out



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.

Recommended Land Pattern Top View

Notes: All dimensions show in millimeters

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

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