

Data Sheet

HC1300U03W

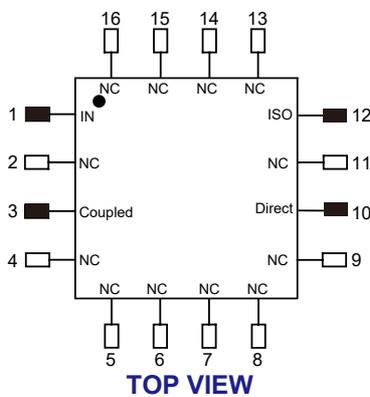
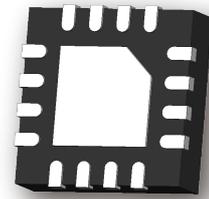
3dB 90° Coupler IC

6 GHz-18 GHz



Features

- Small Size (3×3mm)
- 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



Applications

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

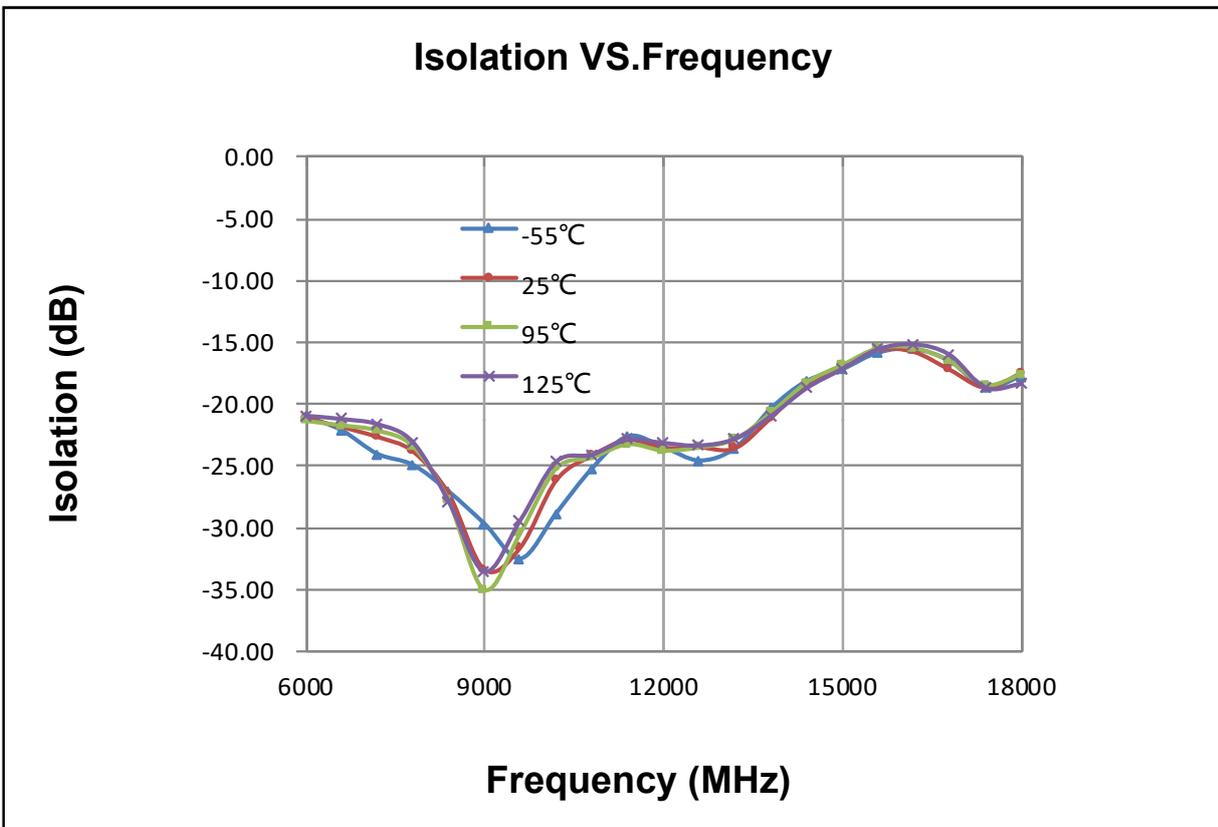
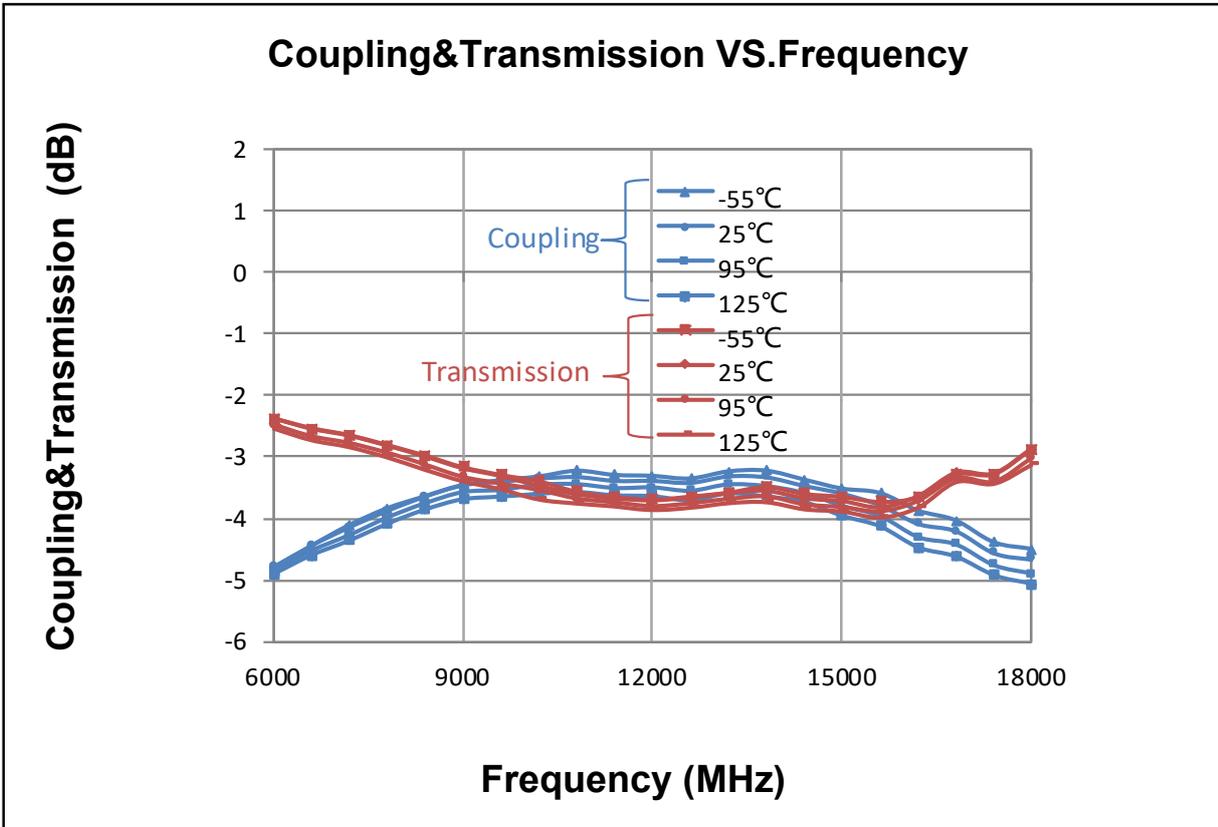
Notes:

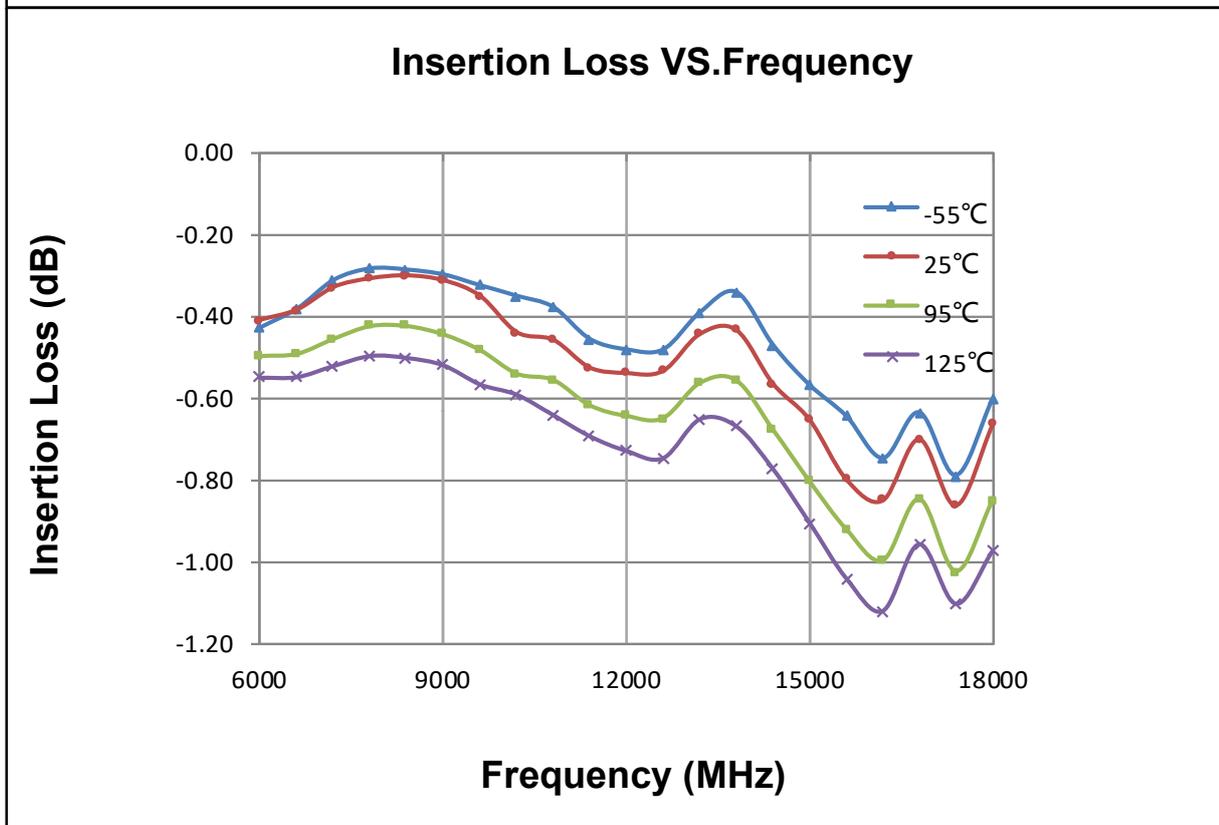
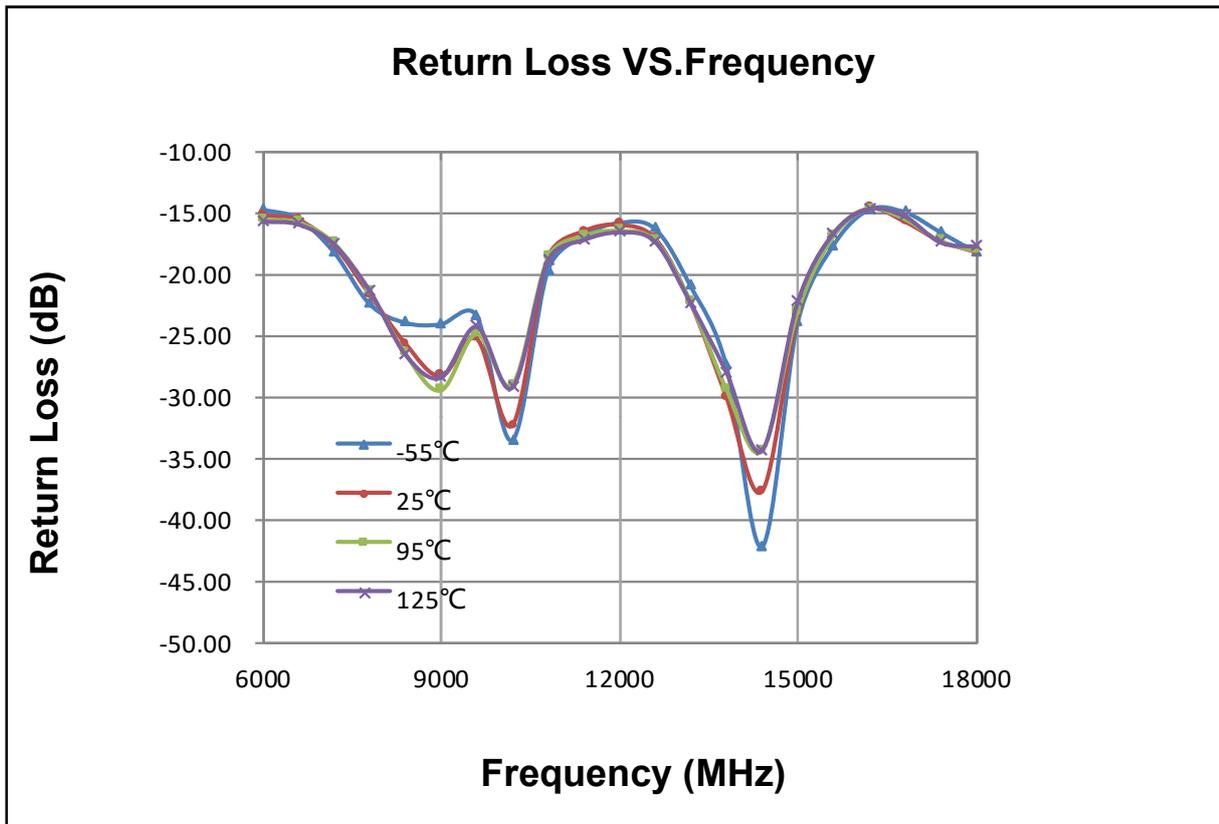
- 1.Require to add Capacitors of DC Blocker between Pins(with black color) and external circuit to prevent DC signal entry to guranteeparts normal work.
- 2.This part has passed through 100% RF test.

Electrical Specifications at 25°C

Frequency Range (MHz)	Insertion Loss (Above 3dB) (dB)		Isolation (dB)		Phase Unbalance (Deviation from 90°) (deg)		Amplitude Unbalance (dB)		Input VSWR		Output VSWR	
	Typ	Max	Min	Typ	Typ	Max	Typ	Max	Typ	Max	Typ	Max
6000-10700	0.3	0.55	20	25	3.0	5.0	0.5	2.8	1.25	1.50	1.25	1.40
10700-14500	0.5	0.7	16	19	4.0	6.0	0.1	0.4	1.25	1.50	1.20	1.30
14500-18000	0.7	1	14.5	16	5.0	7.0	0.5	2.0	1.25	1.50	1.25	1.35

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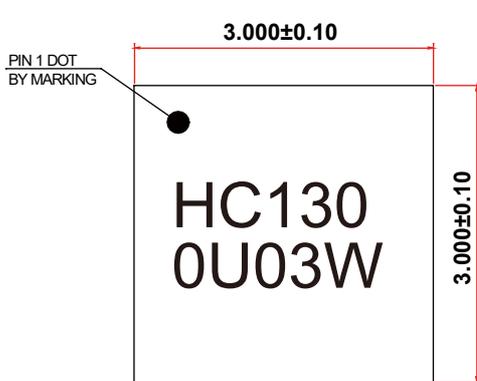
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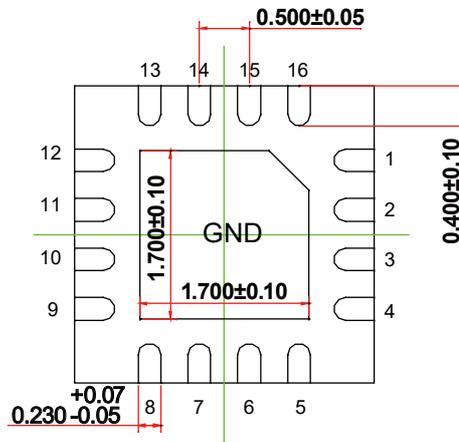
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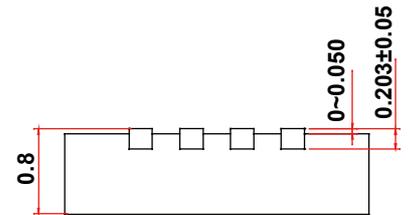
Outline Drawing



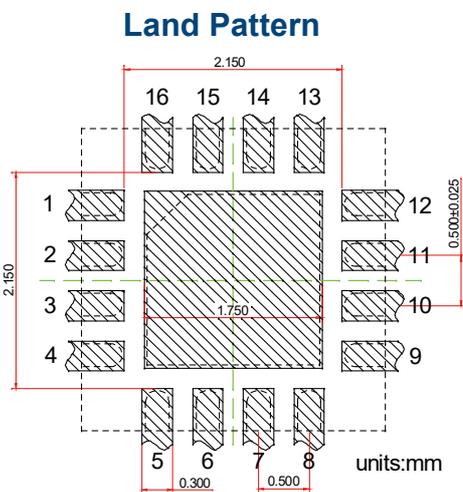
TOP VIEW



BOTTOM VIEW



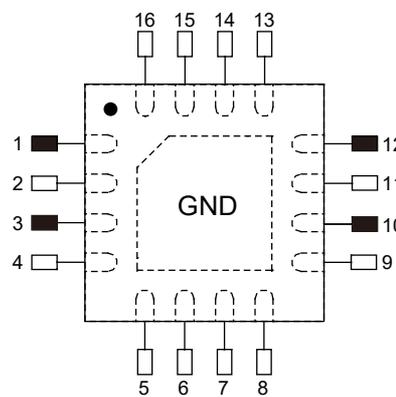
SIDE VIEW



Recommended Land Pattern
Top View

Notes: All dimensions show in millimeters

Pin Out



TOP VIEW

Notes:

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

Pin #	Connection
1	IN
2	NC
3	Coupled
4	NC
5	NC
6	NC
7	NC
8	NC
9	NC
10	Direct
11	NC
12	ISO
13	NC
14	NC
15	NC
16	NC
Center Pad	GND