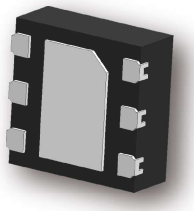
Data Sheet
HC1300U03
3dB 90° Coupler IC
10.7 GHz-14.5 GHz

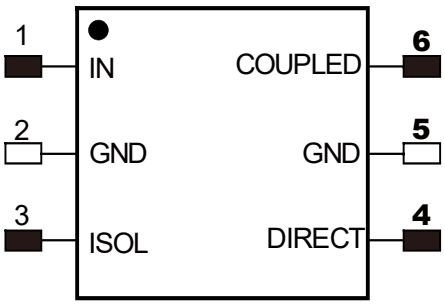
Features

- Small Size (2×2mm)
- Very Low Loss
- Tight Amplitude Balance
- High Isolation
- Low VSWR
- Good Repeatability
- Unpackaged die
- Power handling
  - 4 Watts as a divider
  - 2 Watts as a combiner



RoHS

REACH COMPLIANT



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	10.7		14.5	GHz
Insertion Loss (Above 3dB)	I_L		0.7	1.0	dB
Isolation	Isol	13	16		dB
Phase Unbalance (Deviation from 90°)	$ø_{bal}$		3.0	5.0	deg
Amplitude Unbalance	A_{bal}		0.6	0.8	dB
Input VSWR			1.4	1.6	
Output VSWR			1.3	1.6	

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Tel: 86-755-8355-1886 Fax: 86-755-8355-2533
For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com

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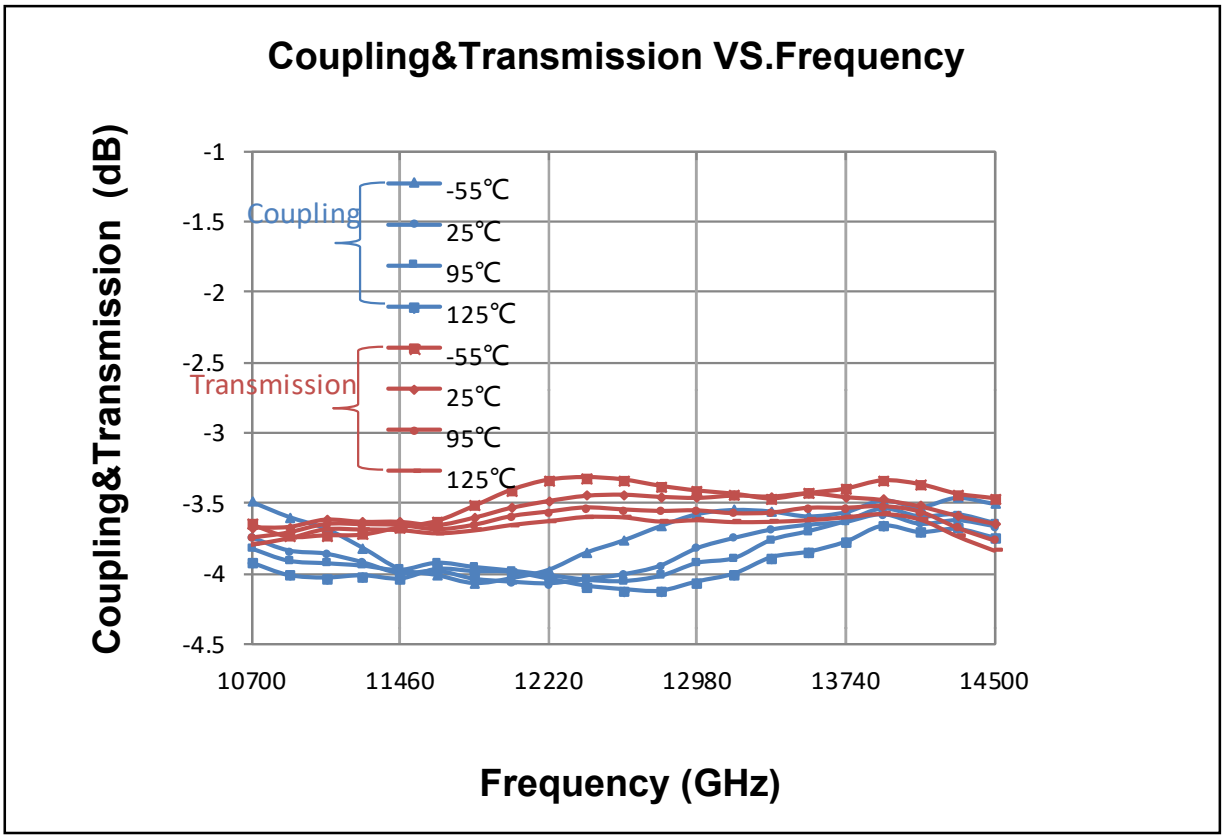

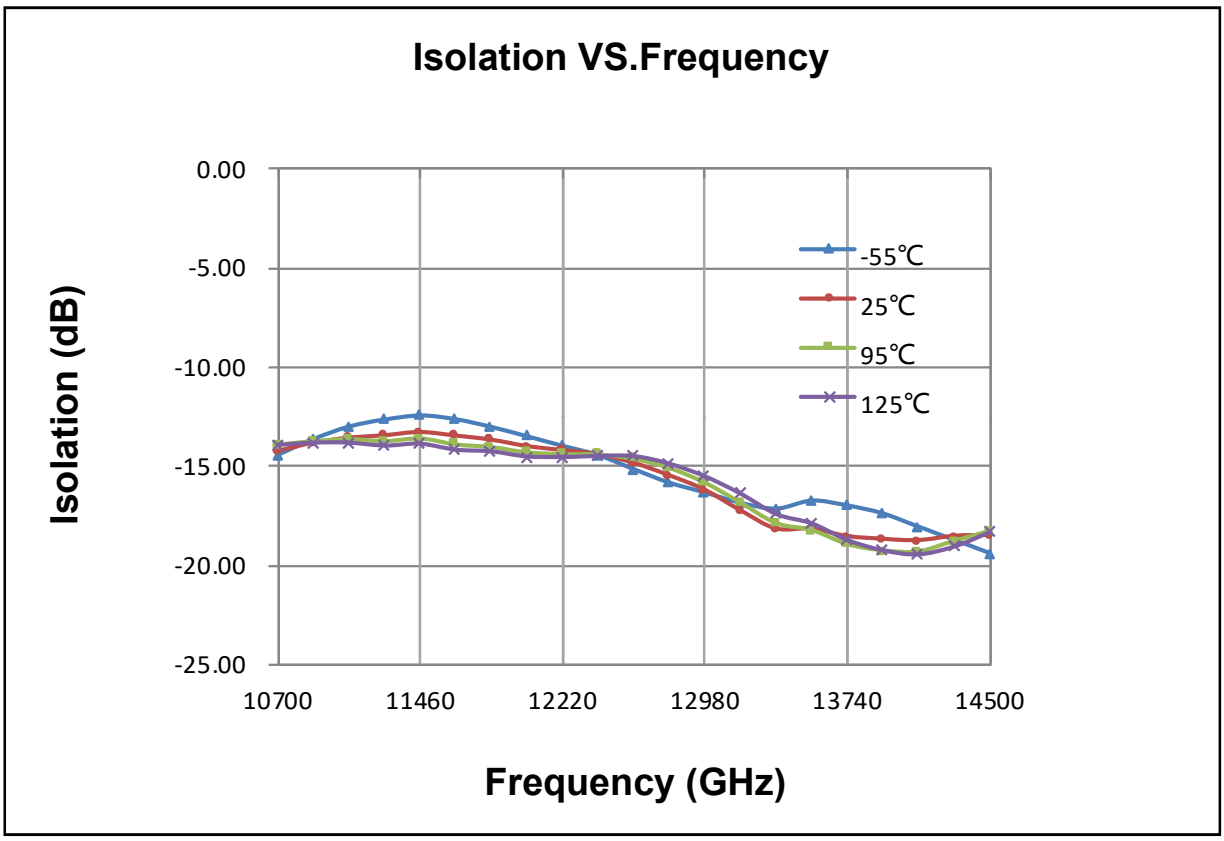

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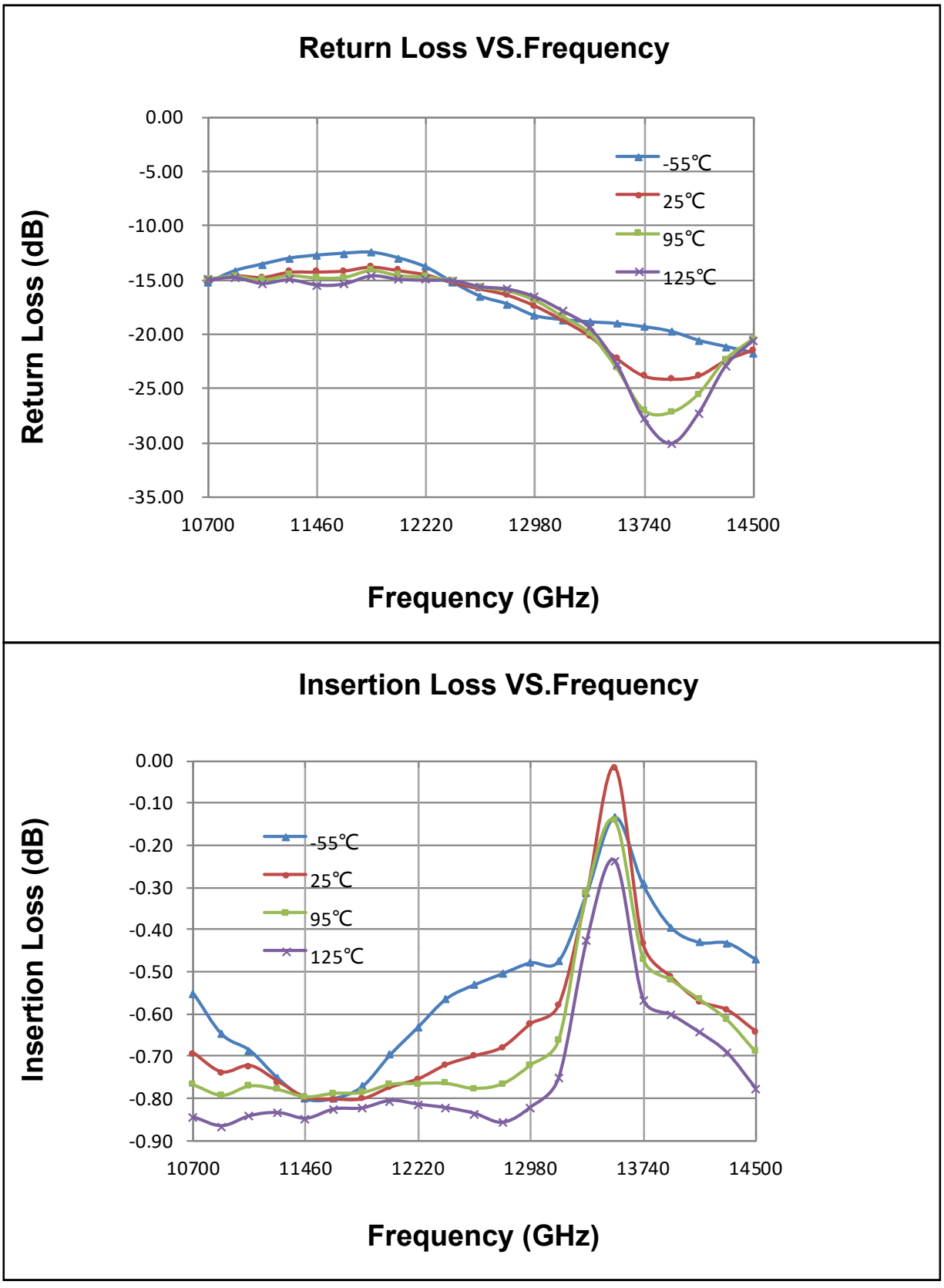

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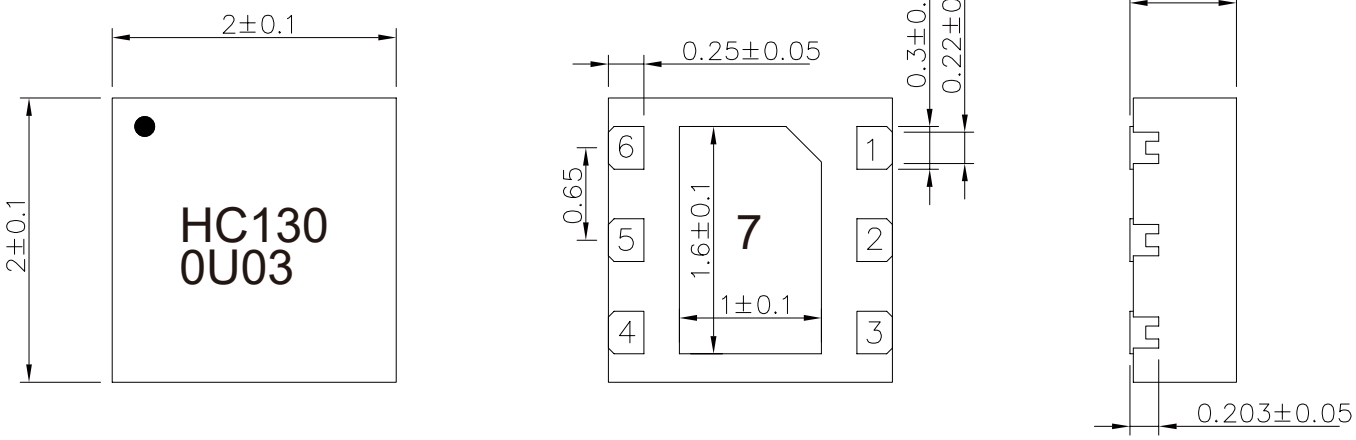
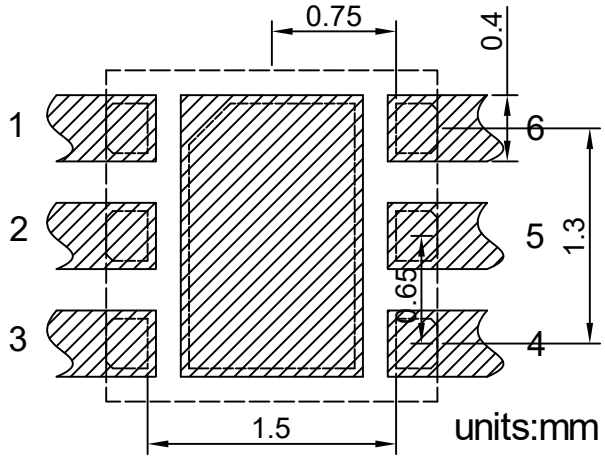
Outline Drawing



TOP VIEW　　BOTTOM VIEW　　SIDE VIEW

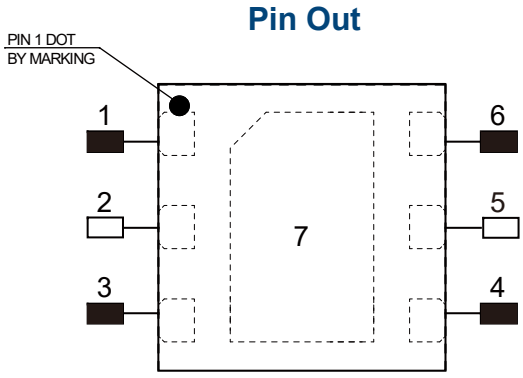
Land Pattern



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 guranteeparts normal work.
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Pin #	Connection
1	IN
2	GND
3	ISOL
4	DIRECT
5	GND
6	COUPLED
7	GND

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