

Data Sheet

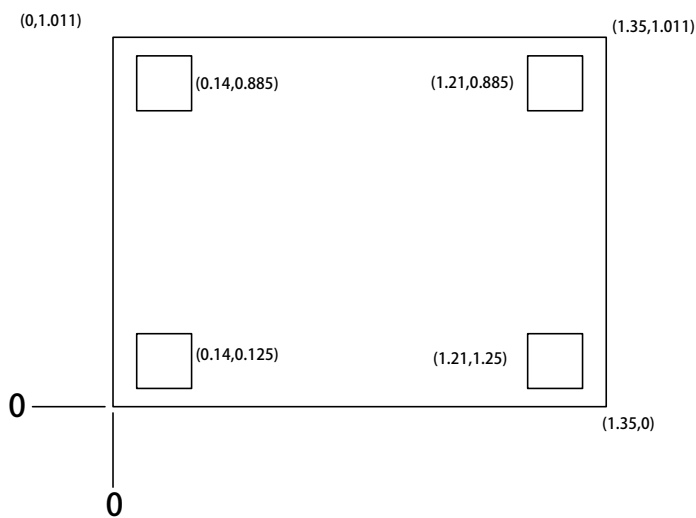
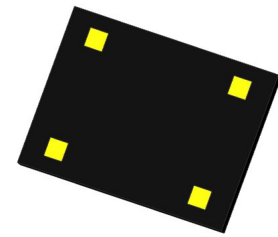
HC1300U03WD

90 Degree Hybrid
6 GHz-18 GHz



Features

- Small Size (1.35×1.01mm)
- Very Low Loss
- Tight Amplitude Balance
- High Isolation
- Low VSWR
- Good Repeatability
- Unpackaged die



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.

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	2.6	1.25	1.50	1.25	1.40
10700-14500	0.5	0.7	16	19	4.0	5.0	0.1	0.4	1.25	1.50	1.20	1.30
14500-18000	0.7	1	14.5	16	5.0	6.0	0.5	2.0	1.25	1.50	1.25	1.35

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 A1.1

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

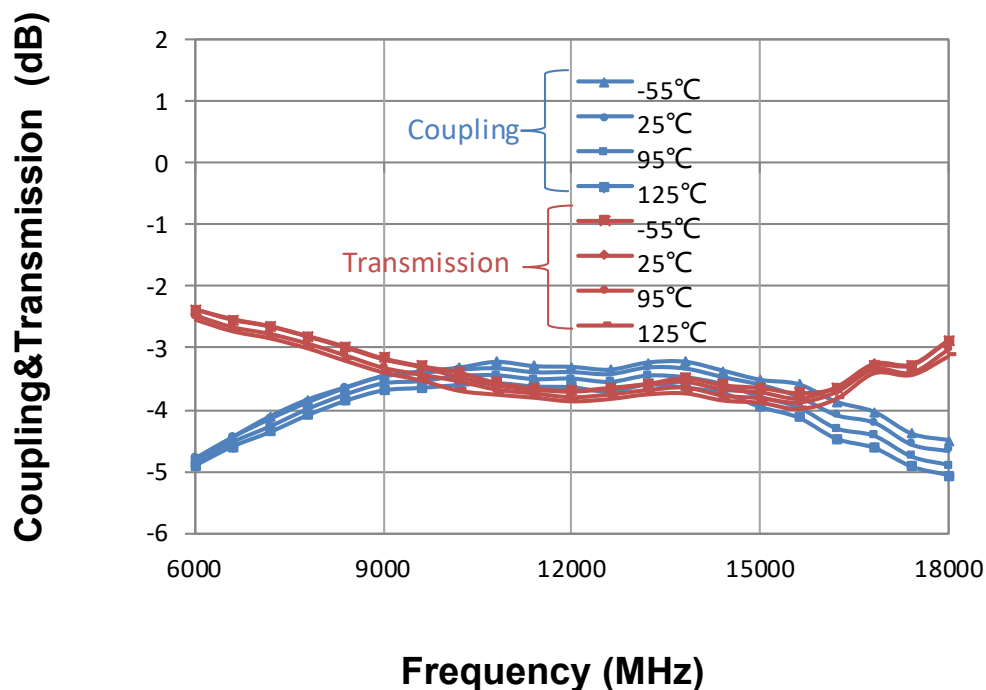
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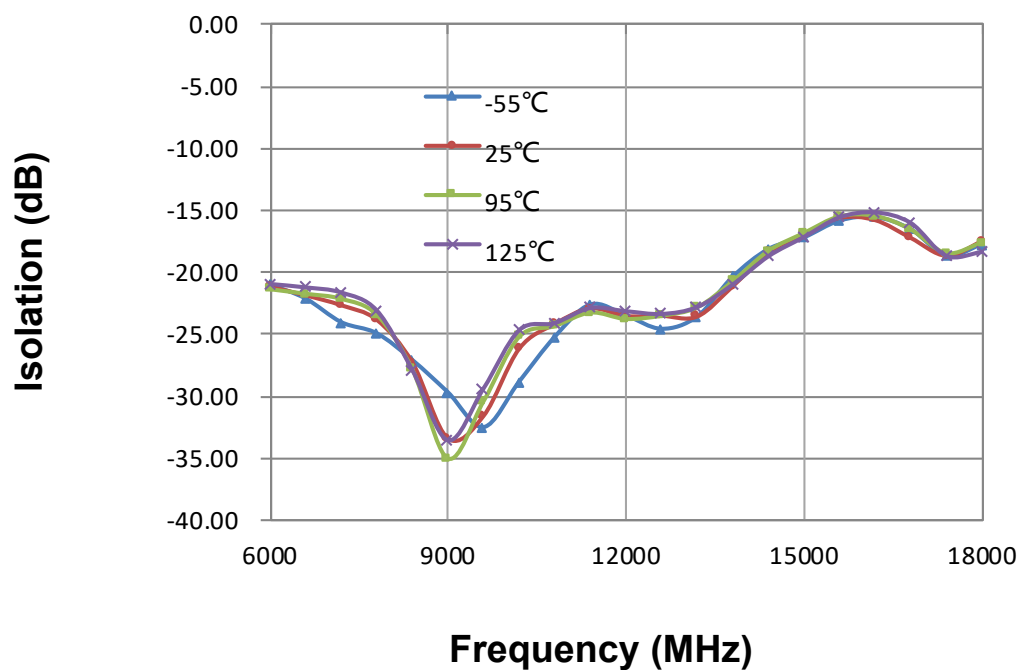
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Coupling&Transmission VS.Frequency



Isolation VS.Frequency



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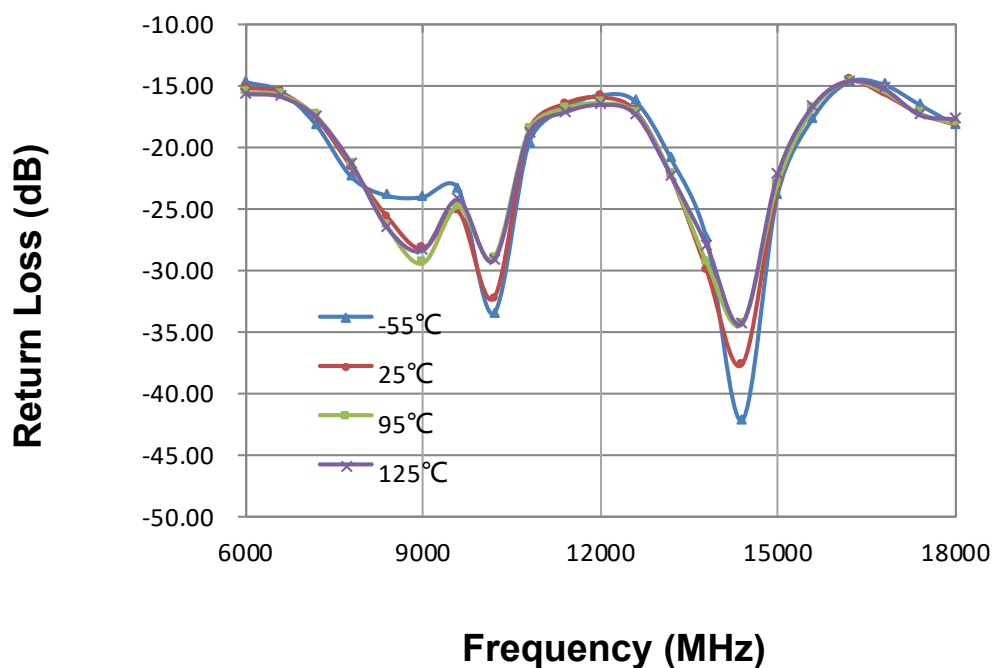
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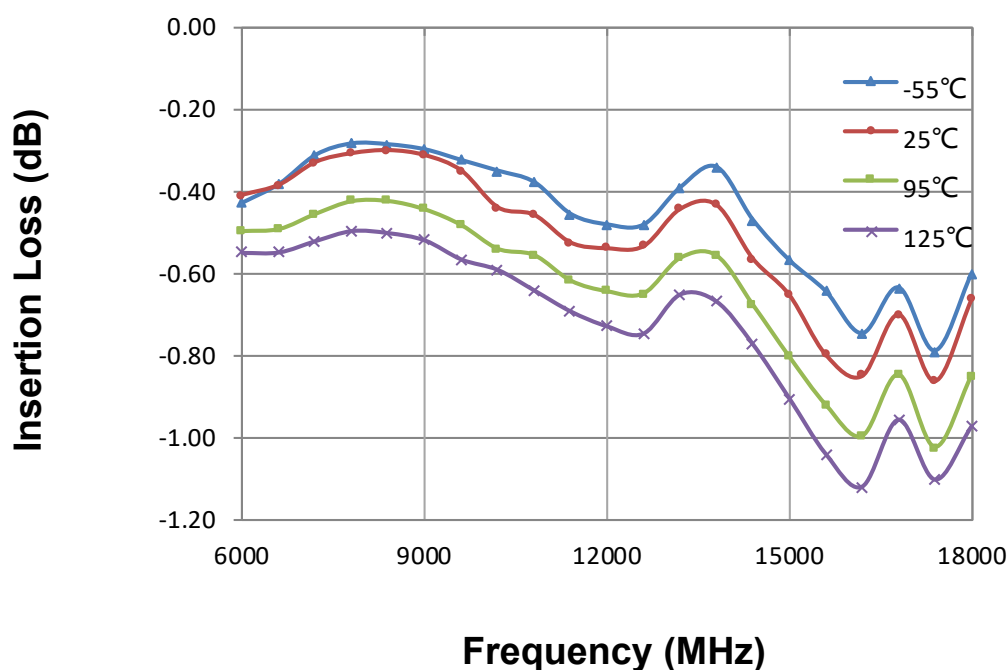
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Return Loss VS.Frequency



Insertion Loss VS.Frequency



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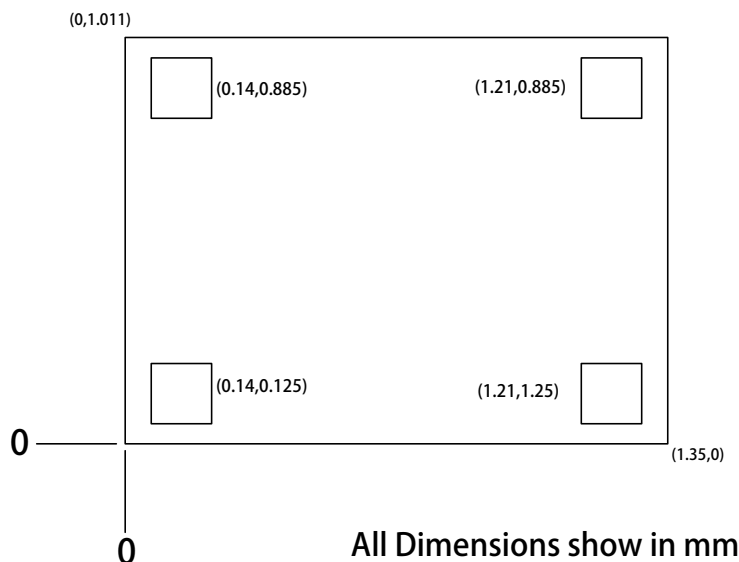
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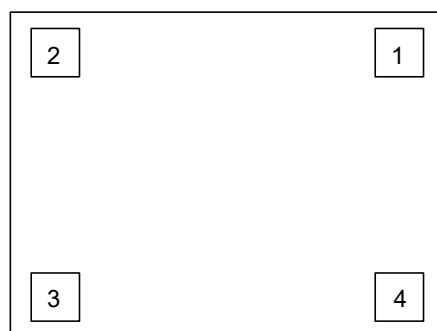
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Outline Drawing



Simplified Schematic and Pad description



Die Bottom:Ground

Function	Pad Number			
INPUT	1	2	3	4
COUPLED	4	3	2	1
DIRECT	3	4	1	2
ISO	2	1	4	3

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