

# Data Sheet

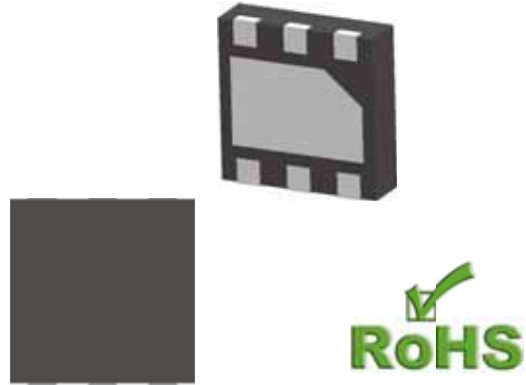
## HC1850U03-030

90 Degree Hybrid  
1.75 GHz-1.99 GHz



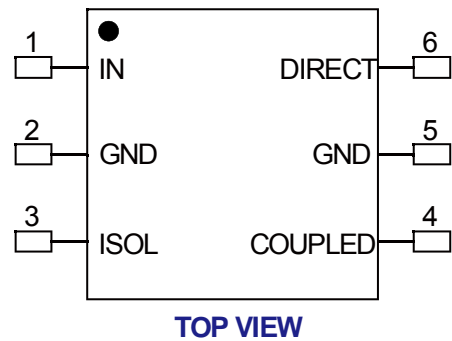
### Features

- 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



### Applications

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



### Electrical Specifications at 25° C

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	F	1750		1990	MHz
Insertion Loss (Above 3dB)	$I_L$		0.35	0.4	dB
Isolation	Isol	25	30		dB
Phase balance	$\varnothing_{bal}$		$\pm 1.0$	$\pm 2.0$	deg
Amplitude balance	$A_{bal}$		$\pm 0.5$	$\pm 0.75$	dB
Return Loss	$R_L$	25	30		dB

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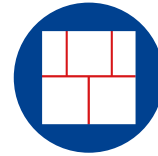
Add : 3F, Building 3, Southern District 2 of Zhongguan Honghualing Industrial Park, Xili, Nanshan, Shenzhen, China  
Tel : 86-755-8355-1886 Fax : 86-755-8355-2533

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

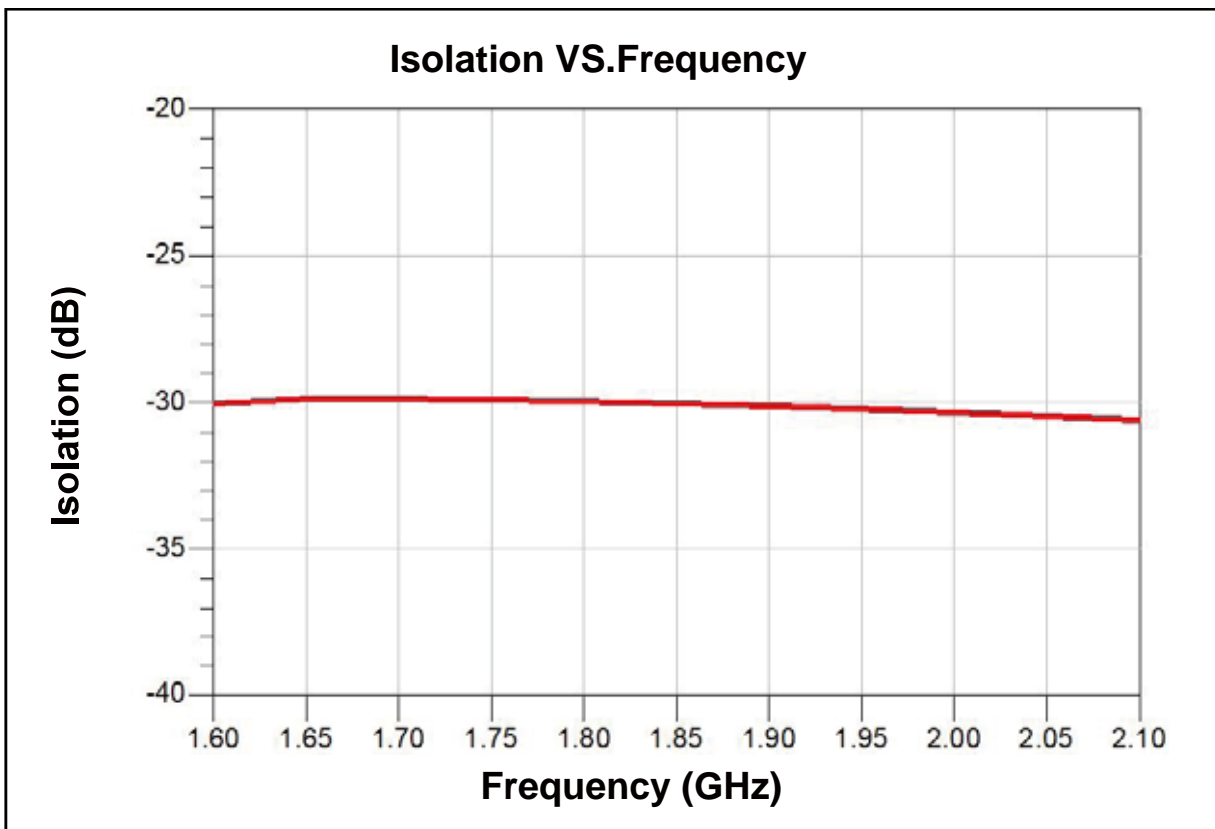
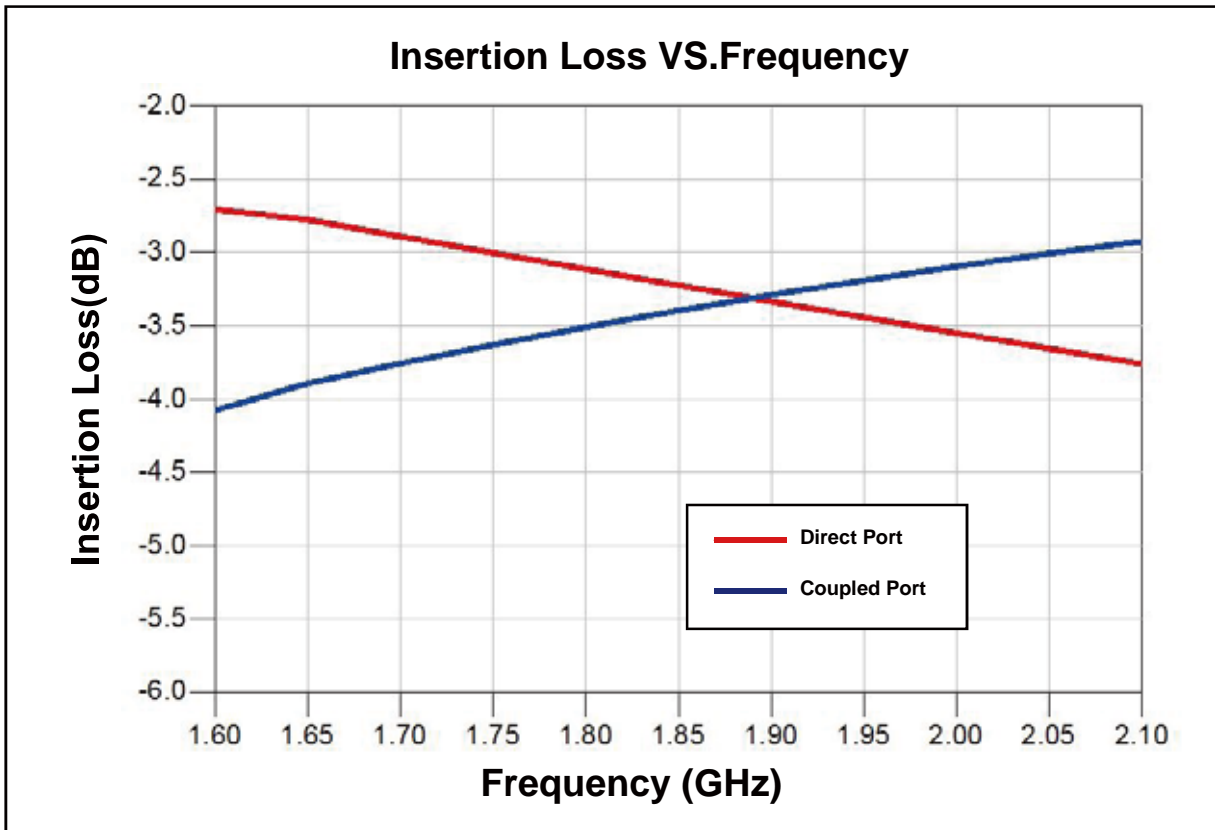
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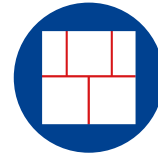
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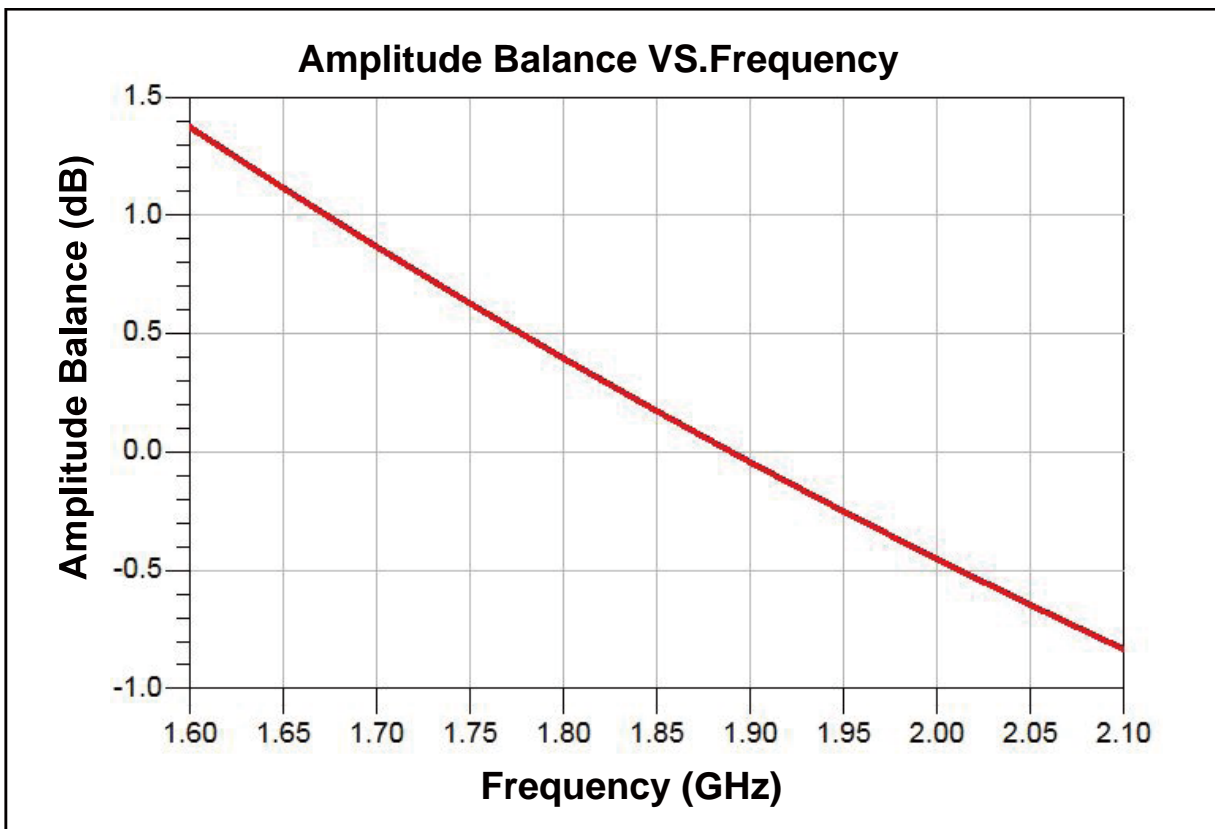
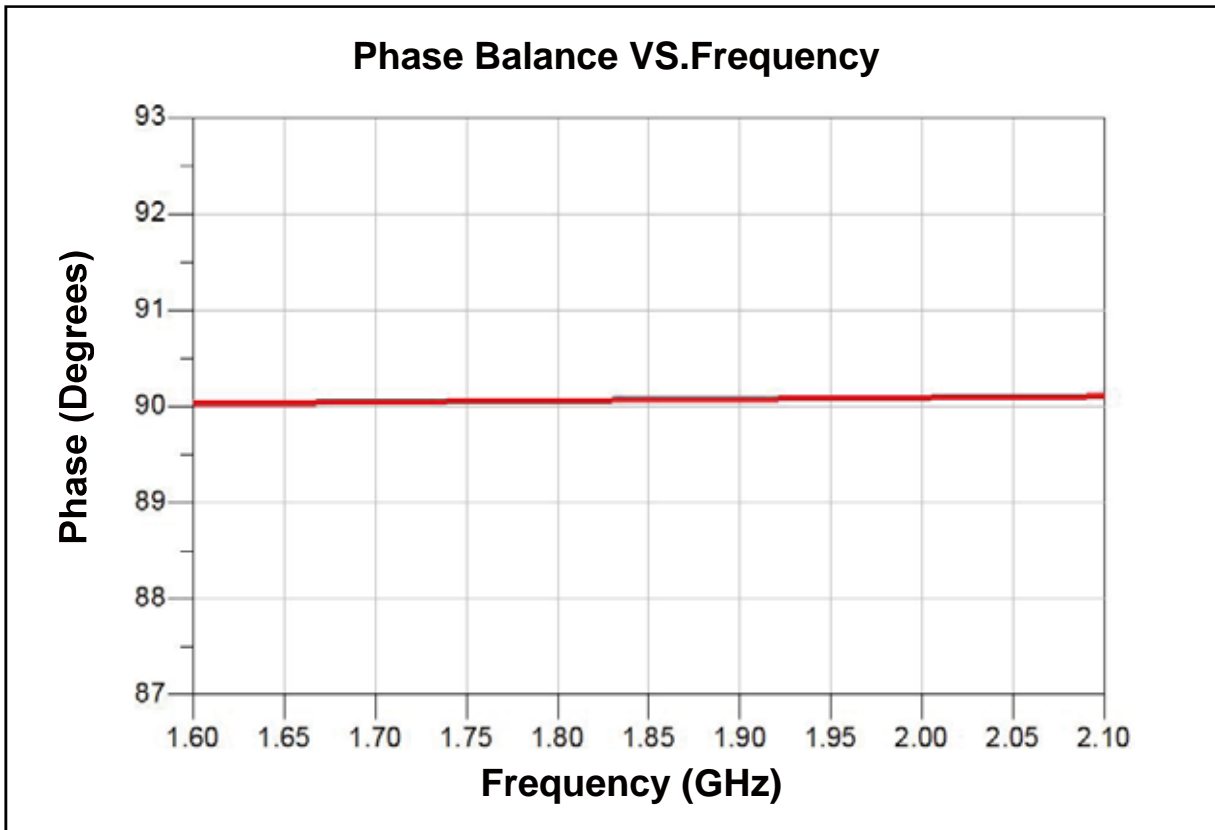
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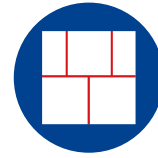
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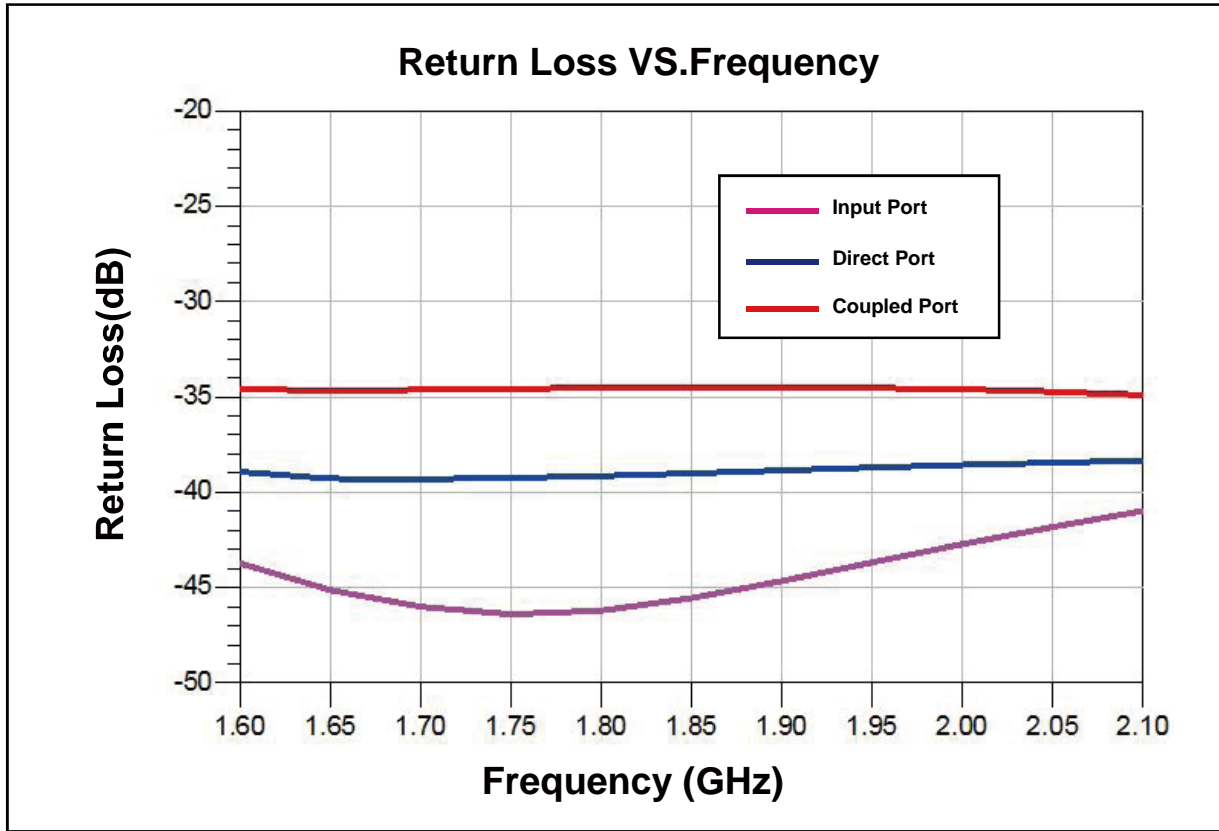
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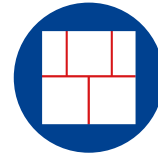
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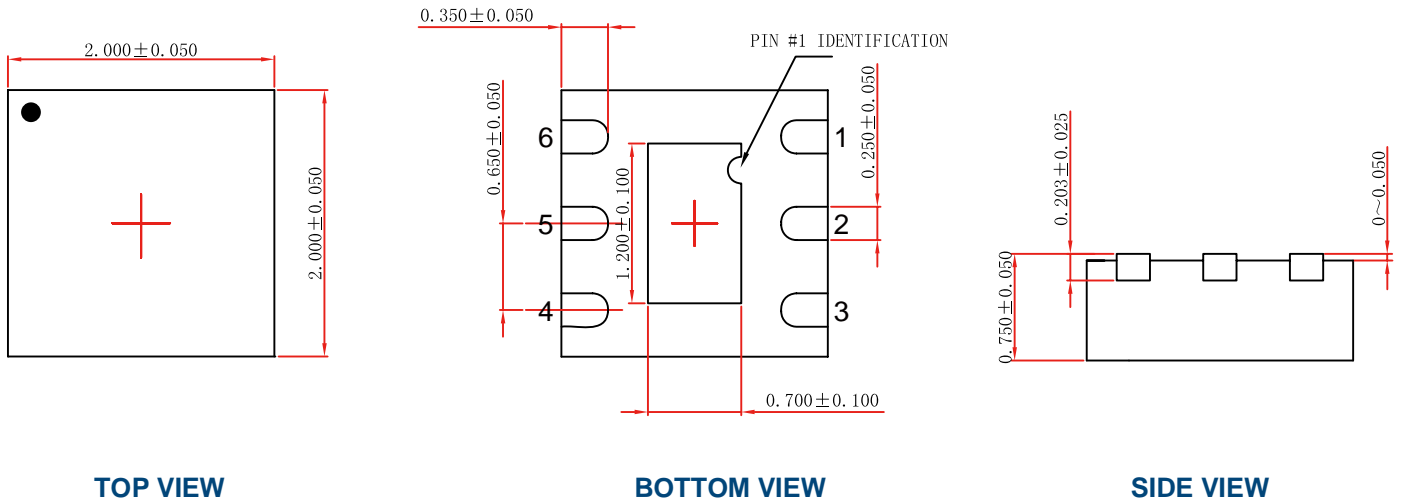
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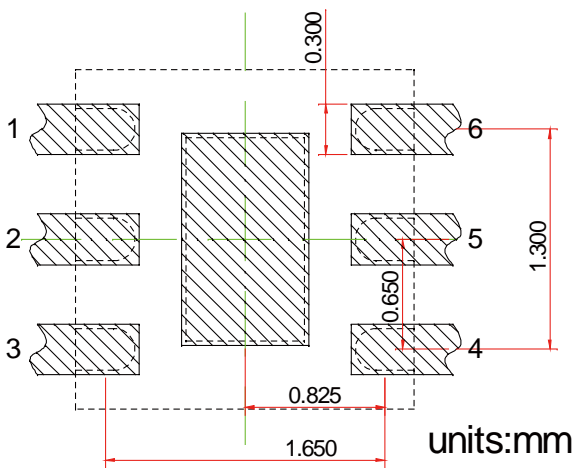


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### Outline Drawing



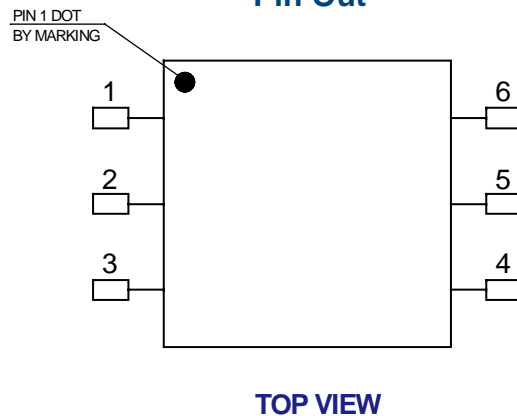
### Land Pattern



### Recommended Land Pattern Top View

Notes: All dimensions show in millimeters

### Pin Out



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

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