

Data Sheet

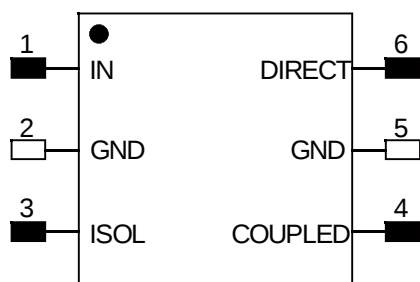
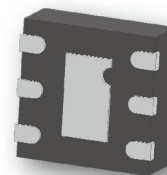
DC1800U10-123

Directional Coupler
1700 MHz-2200 MHz



Features

- Small Size (2×2mm)
- Very Low Loss
- Excellent directivity
- Broad frequency coverage
- High Isolation
- Low VSWR
- Good Repeatability
- Tape & Reel
- Power handling:4 watts



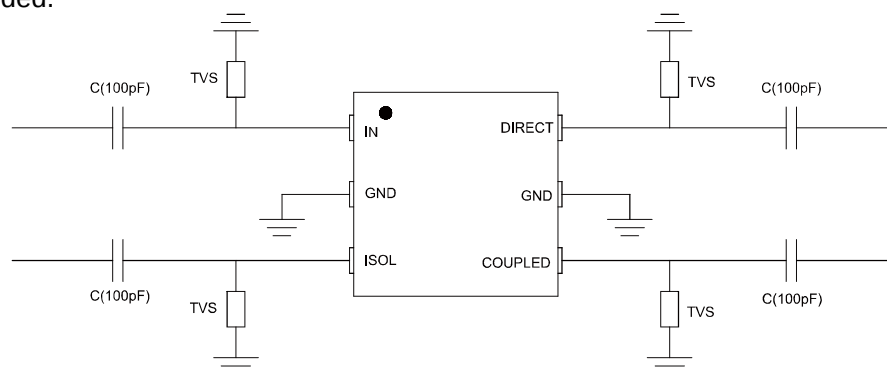
TOP VIEW

Applications

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

Notes:

1. This part has passed through 100% RF test.
2. Suggest to add Capacitors of DC Blocker between Pins(with black color) and external circuit to prevent DC signal entry to guarantee parts normal work.
3. Suggest to add a TVS Diode in parallel between Electrode (with black color) and Capacitor of DC Blocker to provide ESD protection for the product. TVS Diode use ON Semiconductor's ESD9101 is recommended.



ESD Rating

Human Body Model (HBM): $\leq 650\text{V}$ in accordance with ANSI/ESD STM 5.1 - 2001

Machine Model (MM): $\leq 50\text{V}$ in accordance with ANSI/ESD STM 5.2 - 1999

Yantel Corporation

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

Rev A4

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

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DC1800U10-123

Directional Coupler

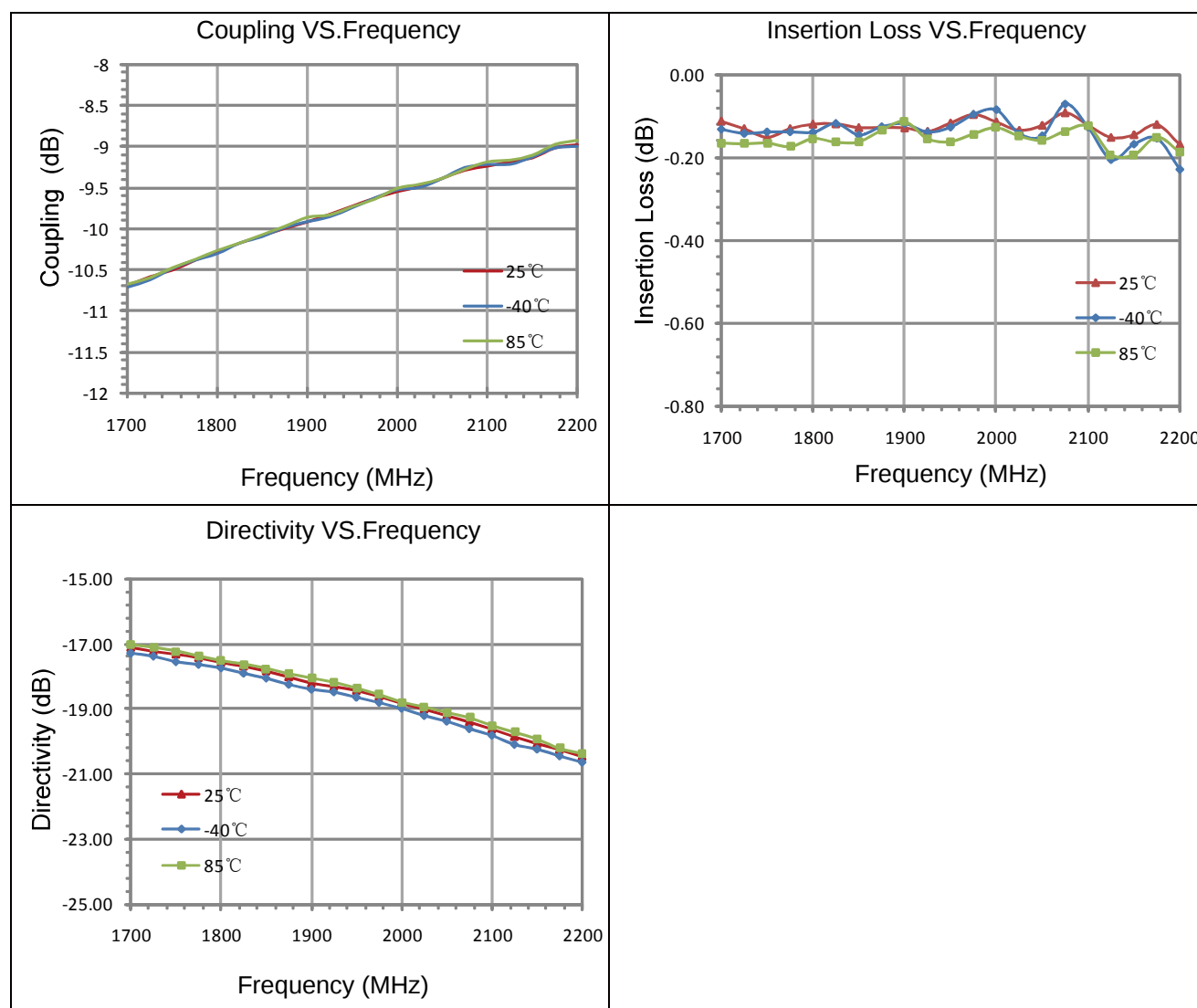
1700 MHz-2200 MHz



Electrical Specifications at 25° C

Part No.	Freq. Range (MHz) FL~FU	Power (W)	Size LxW (mm)	Coupling (dB)			Insertion loss (dB)	VSWR(∞:1)			Directivity (dB)
				Min	Typ	Max		Min	Typ	Max	
DC1800U10 -123	1700~2200	4	2X2		10.2		0.18		1.10		18
	1805~1880				10.2		0.18		1.10		19
	1930~1990				9.5		0.18		1.10		20
	2110~2170				9.1		0.18		1.10		22

Typical Performance (-40°C, 25°C, 85°C: 1700-2200 MHz)



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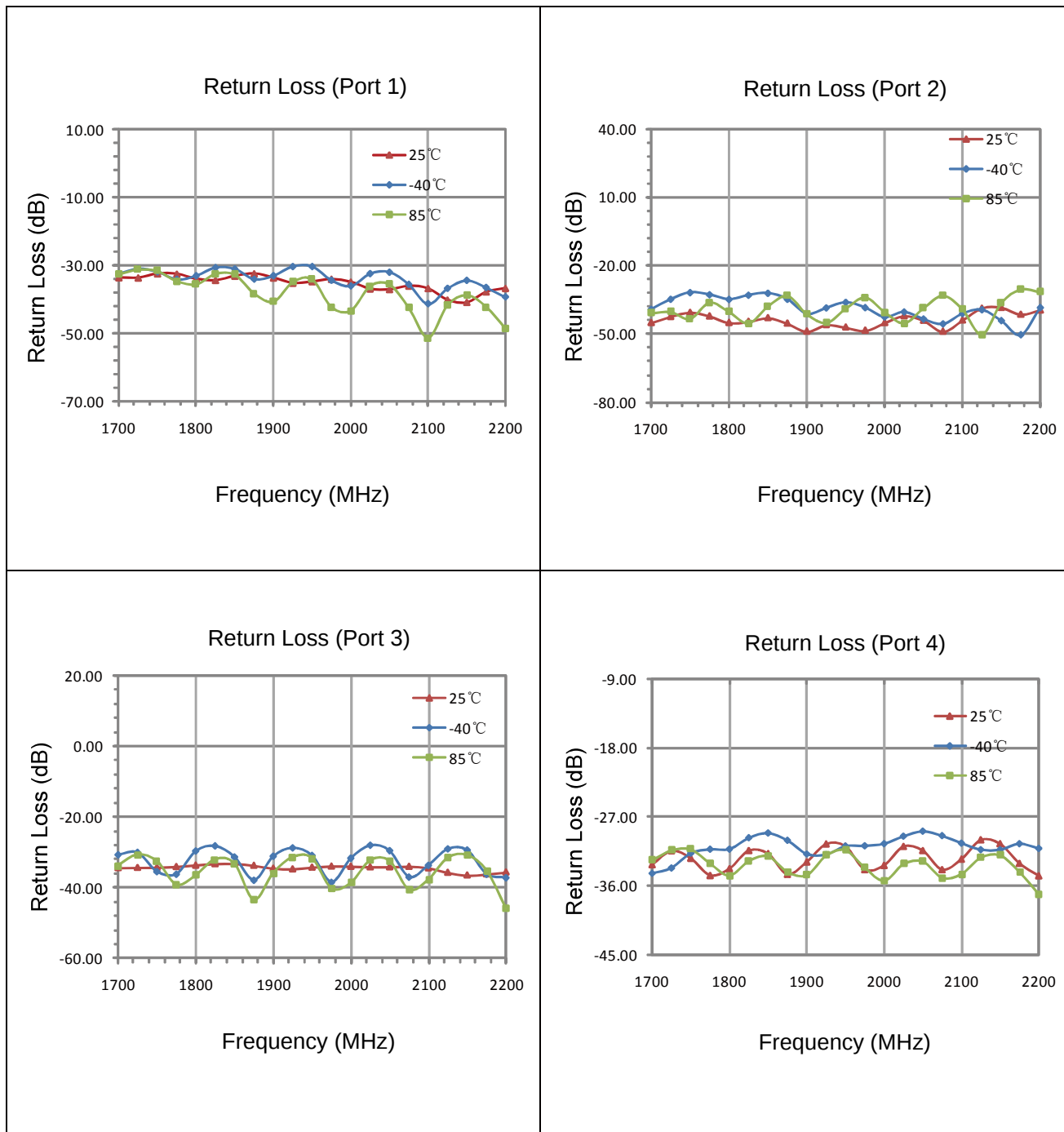
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1700 MHz-2200 MHz



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Frequency (GHz)

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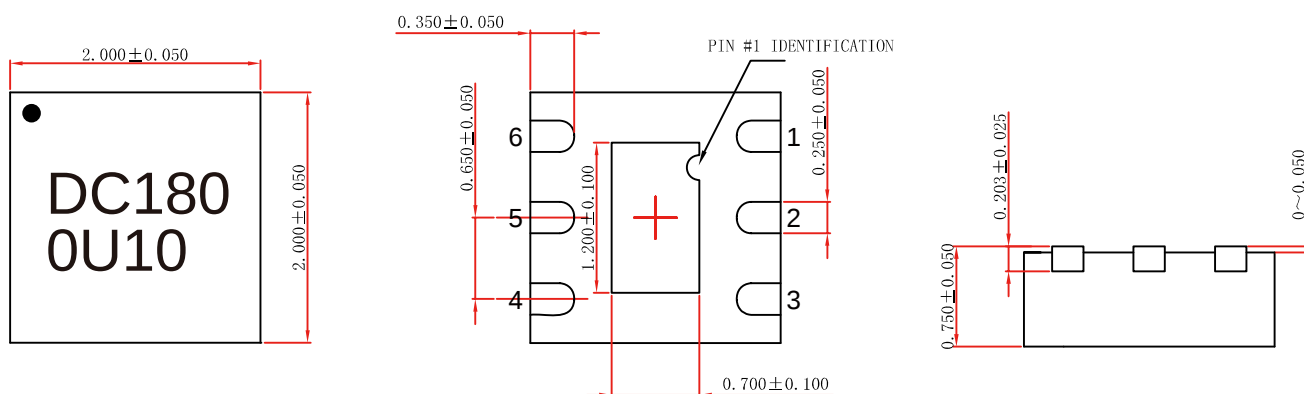
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Directional Coupler
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Outline Drawing

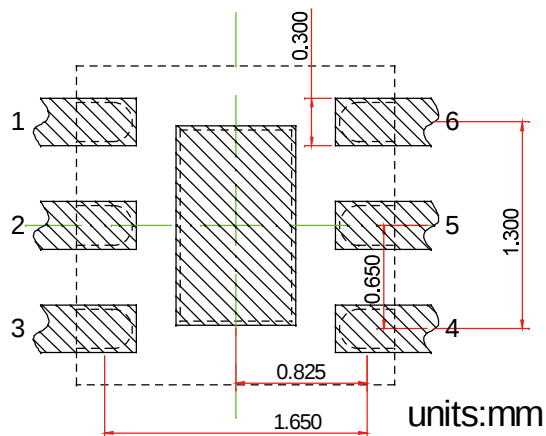


TOP VIEW

BOTTOM VIEW

SIDE VIEW

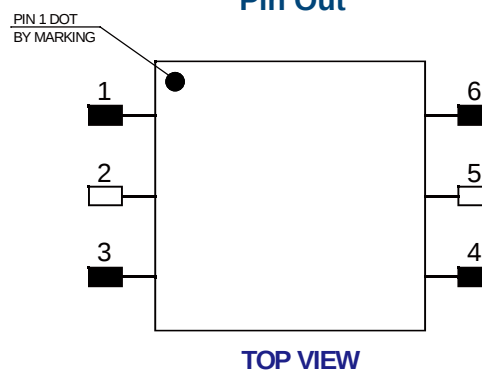
Land Pattern



Recommended Land Pattern Top View

Notes: All dimensions show in millimeters

Pin Out



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.

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

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