

Data Sheet

DC1800U10-123

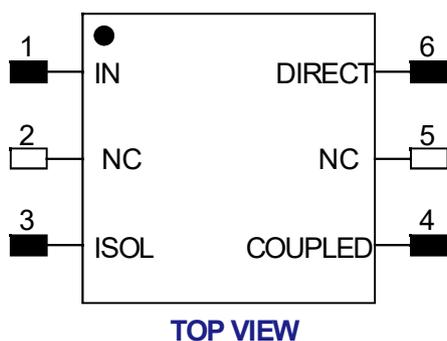
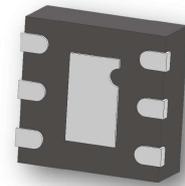
Directional Coupler

1700 MHz-2200 MHz



Features

- Small Size (2x2mm)
- Very Low Loss
- Excellent directivity
- Broad frequency coverage
- High Isolation
- Low VSWR
- Good Repeatability
- Tape & Reel
- Power handling:4 watts

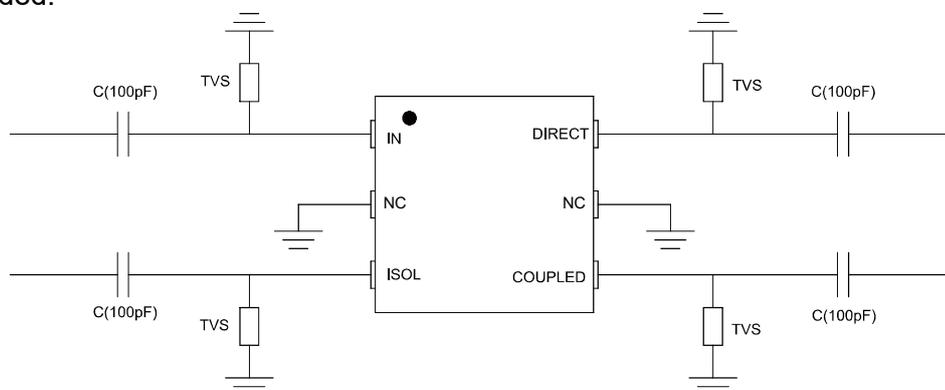


Applications

- 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): $\leq 650V$ in accordance with ANSI/ESD STM 5.1 - 2001

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

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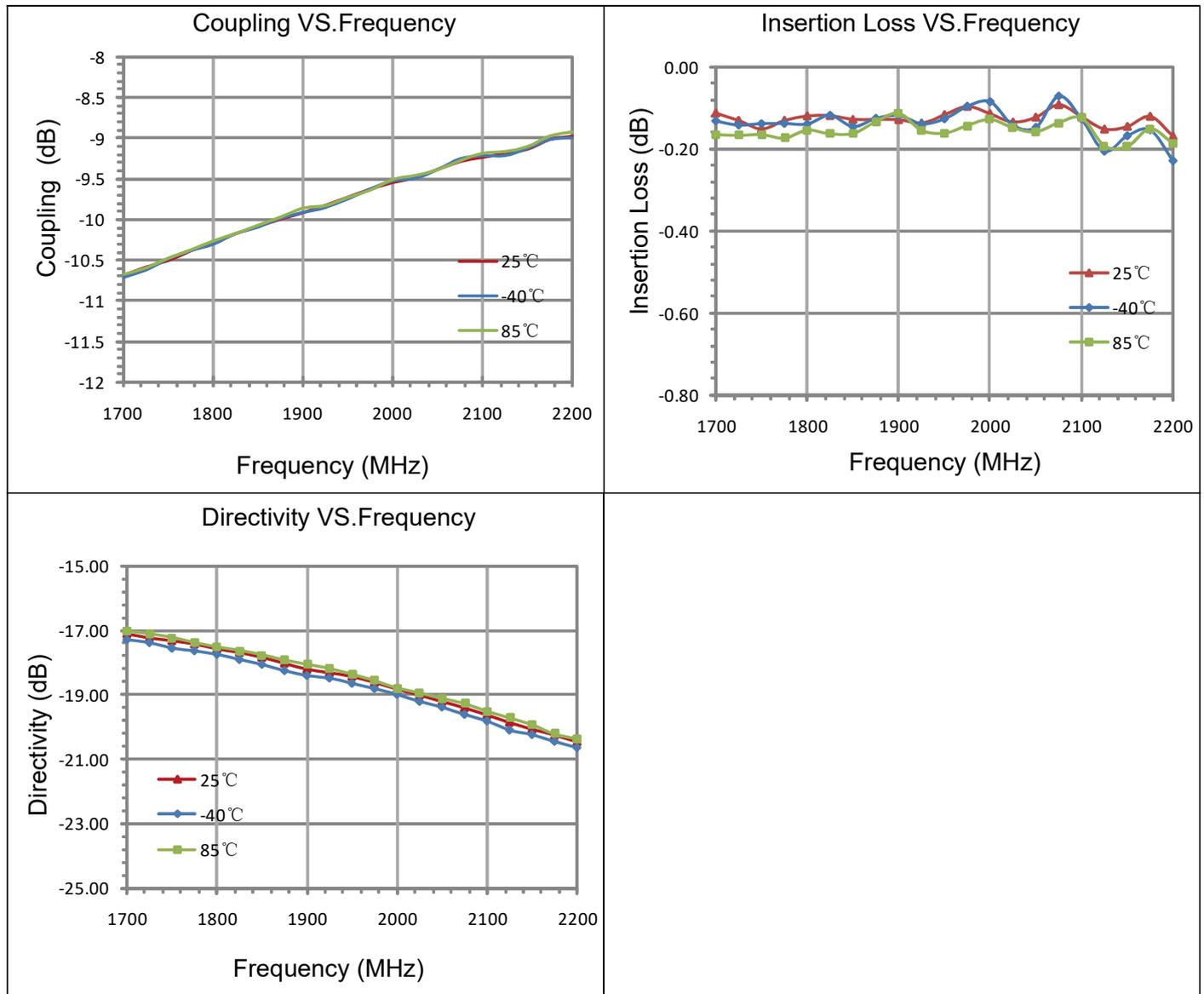
1700 MHz-2200 MHz



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		0.35		1.10		18
	1805~1880				10.2		0.35		1.10		19
	1930~1990				9.5		0.35		1.10		20
	2110~2170				9.1		0.35		1.10		22

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



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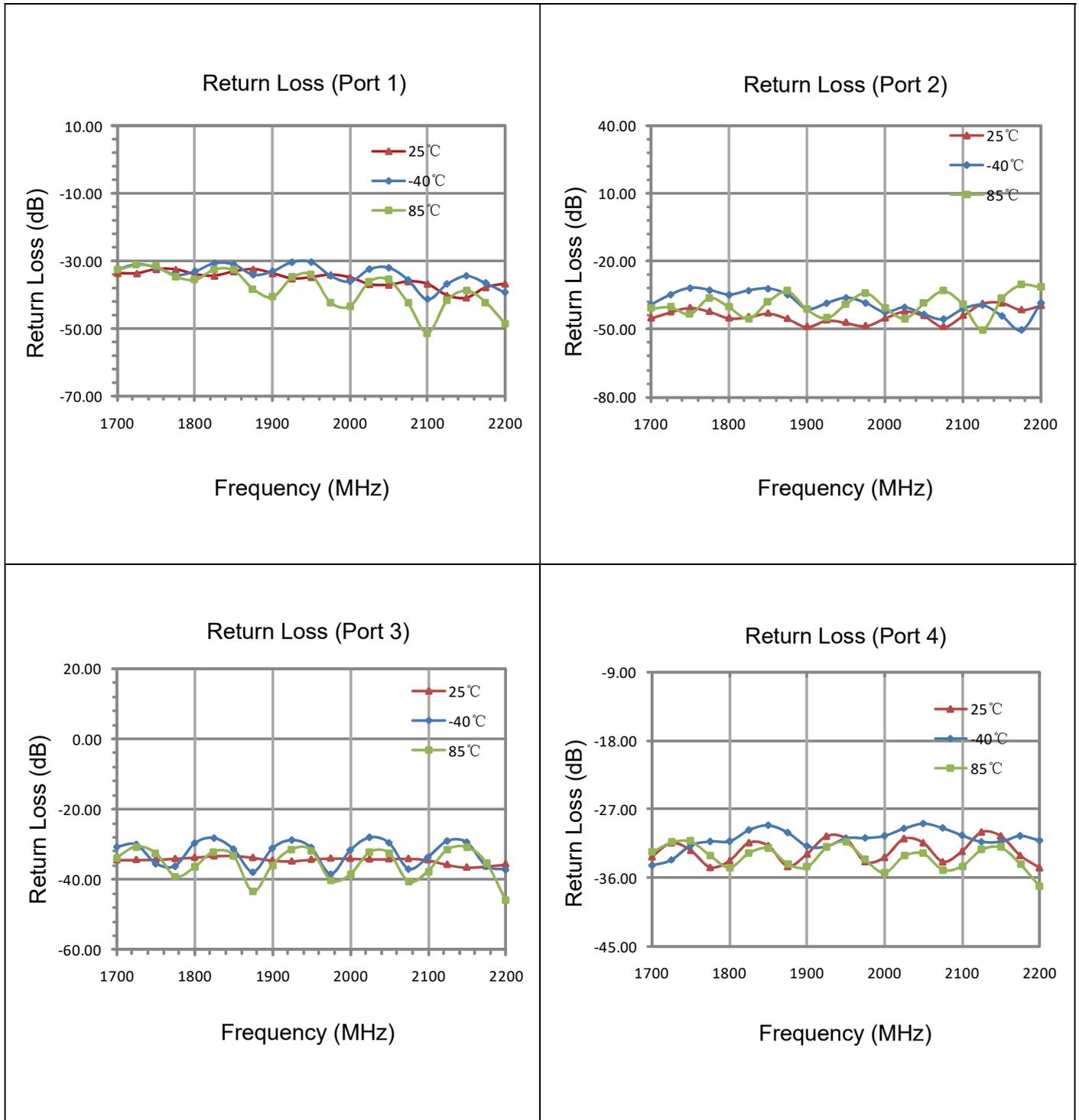
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Frequency (GHz)

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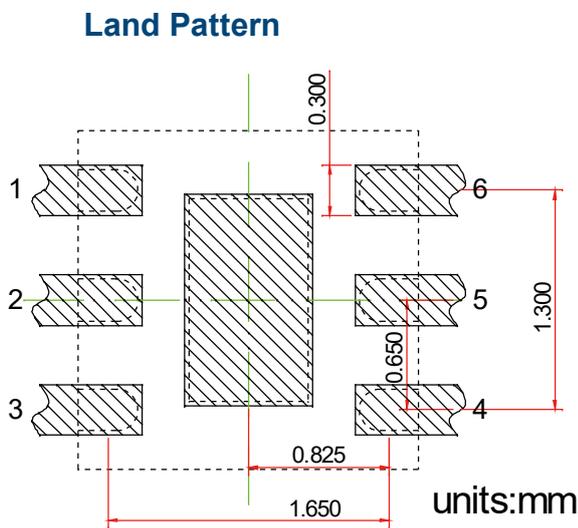
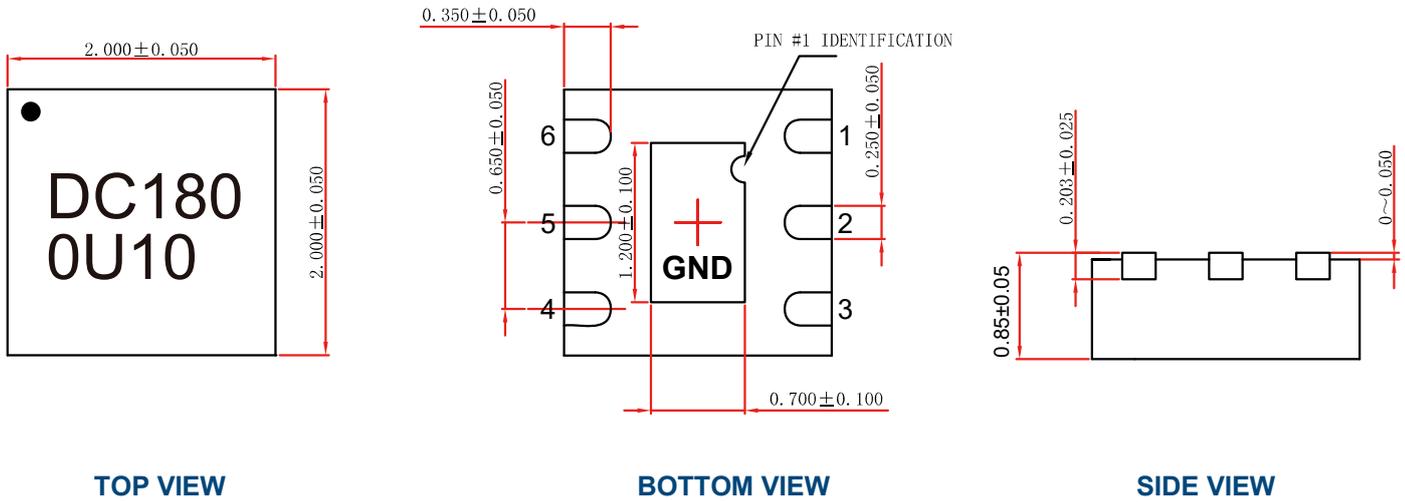
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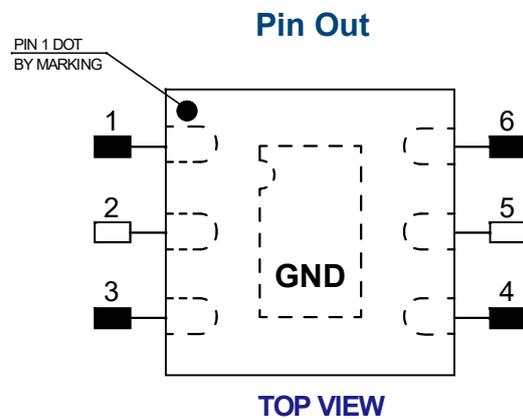


Outline Drawing



Recommended Land Pattern Top View

Notes: All dimensions show in millimeters



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.

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