

Data Sheet

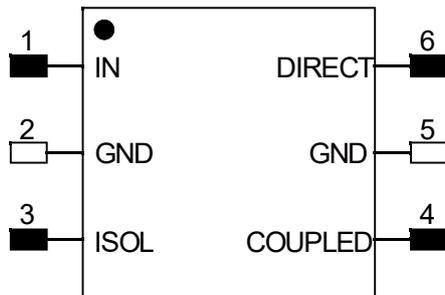
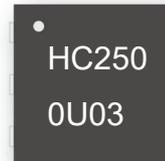
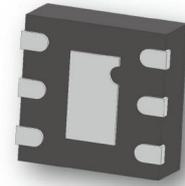
HC2500U03-050

3dB 90° Coupler IC
2.30 GHz-2.65 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



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	2300		2650	MHz
Insertion Loss (Above 3dB)	I _L		0.35	0.5	dB
Isolation	Isol	20	24		dB
Phase balance	∅ _{bal}		1.0	2.0	deg
Amplitude balance	A _{bal}		0.5	1.0	dB
Return Loss	R _L	18	22		dB

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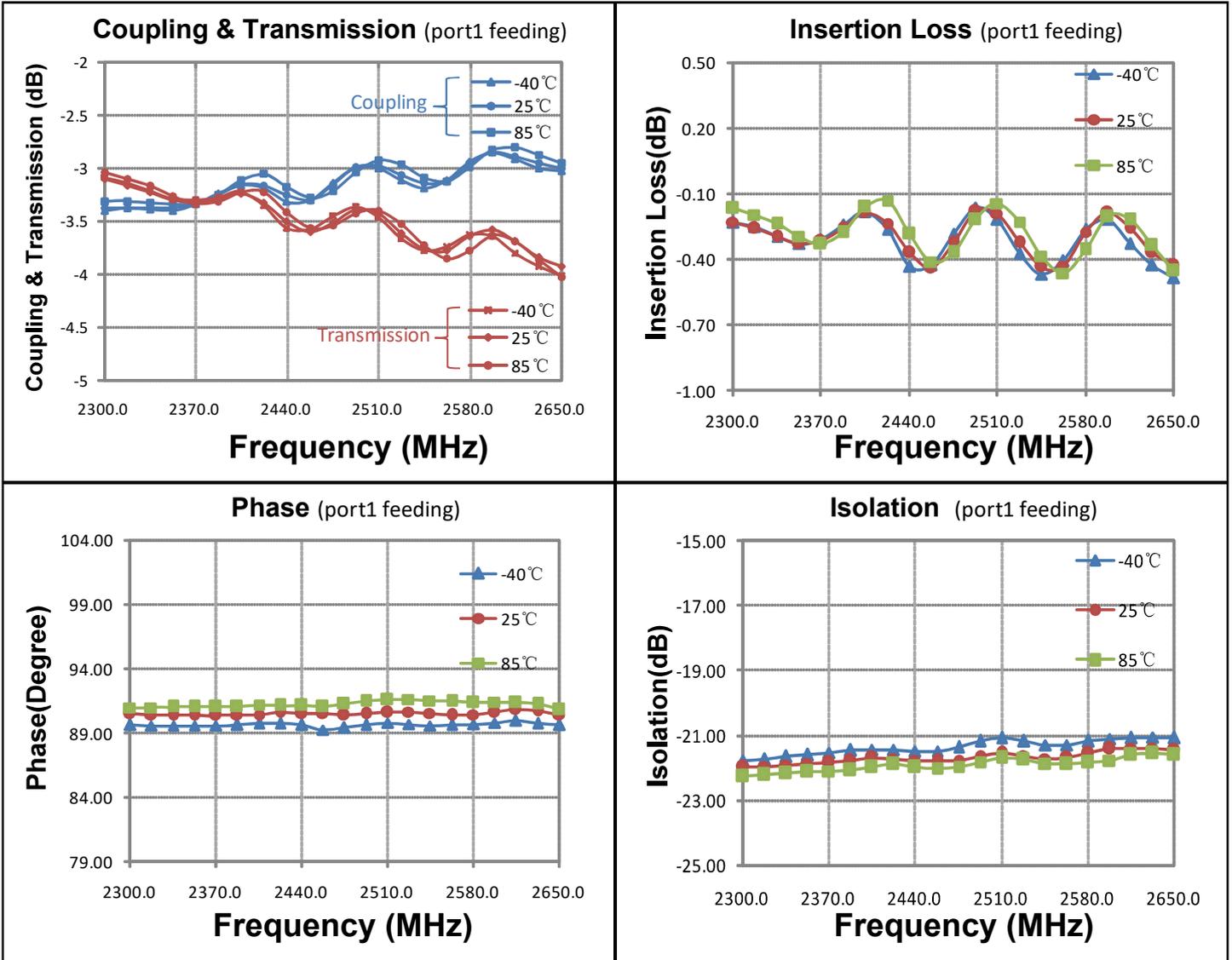
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Typical Performance (-40°C, 25°C, 85°C: 2.30-2.65 GHz)



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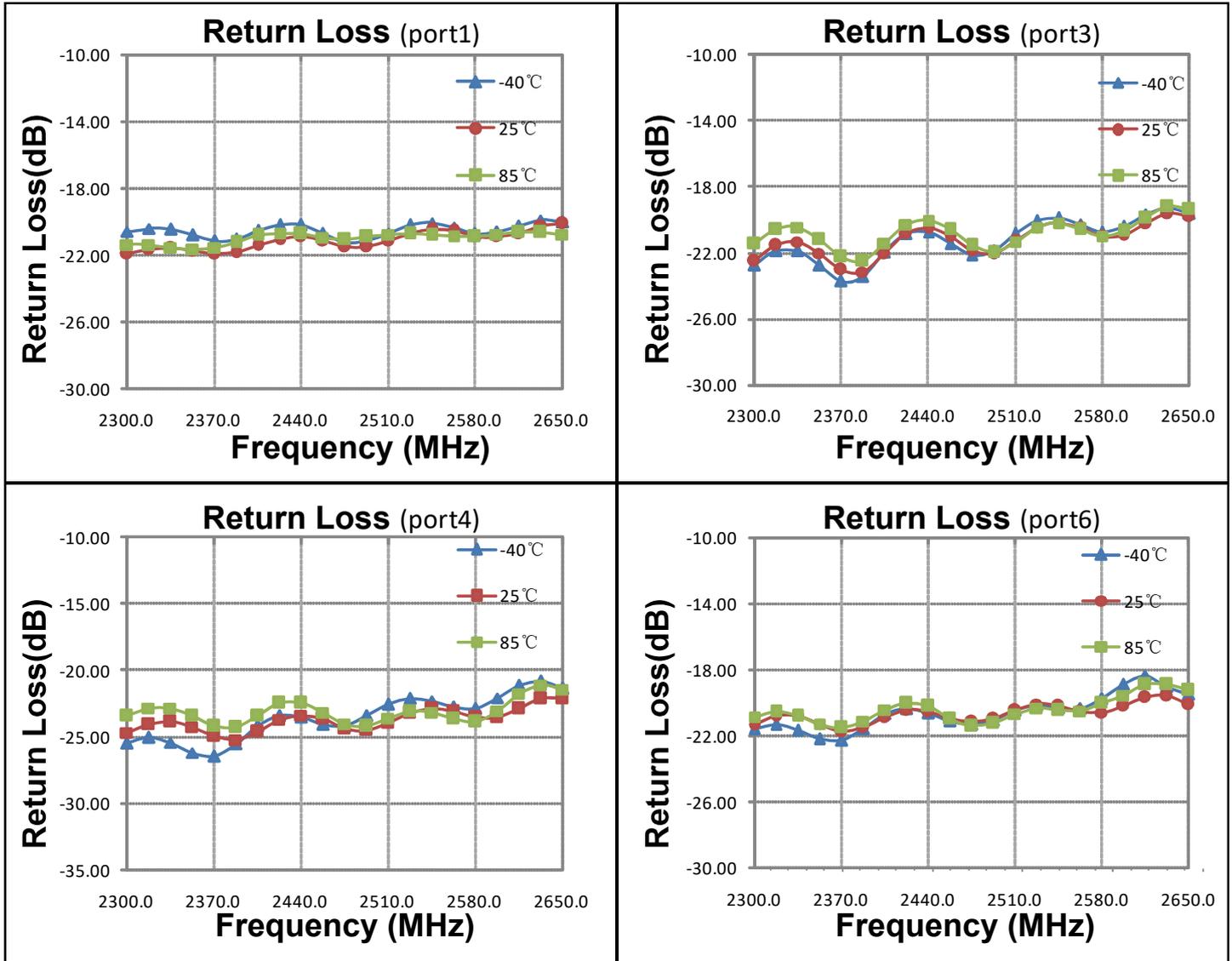
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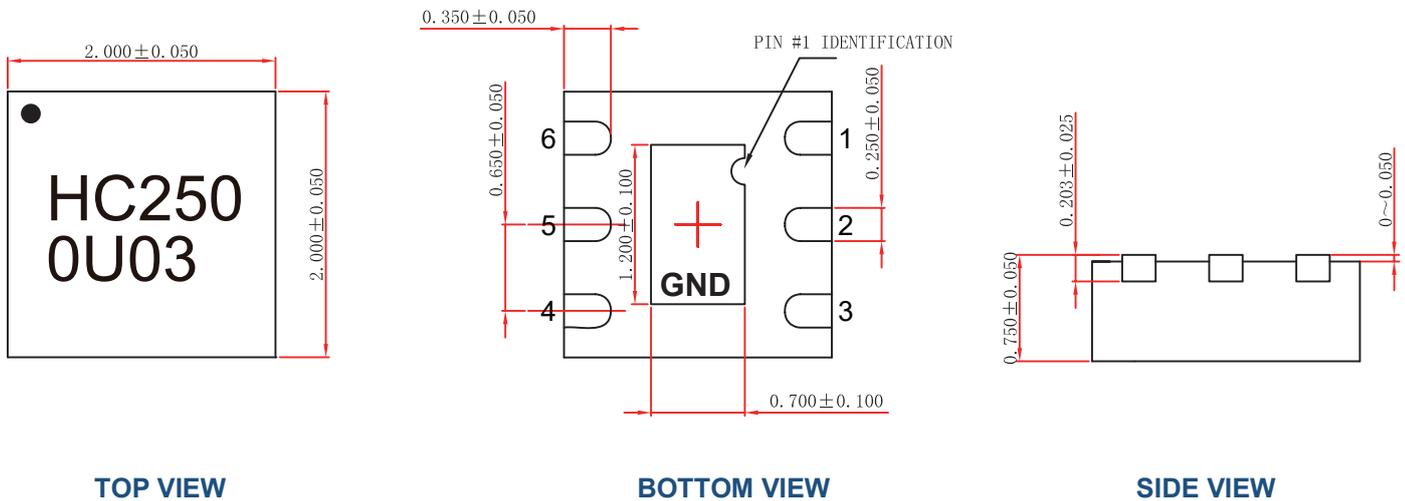
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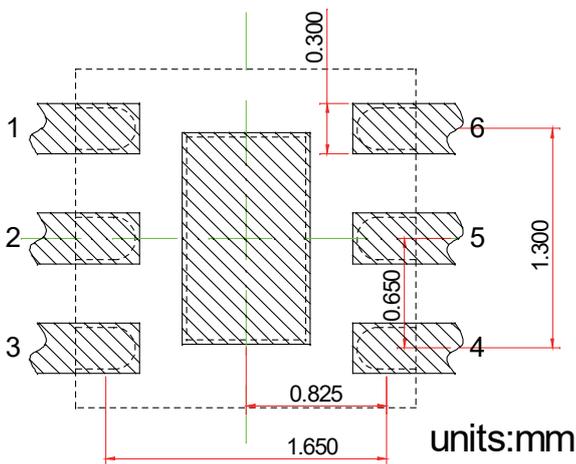
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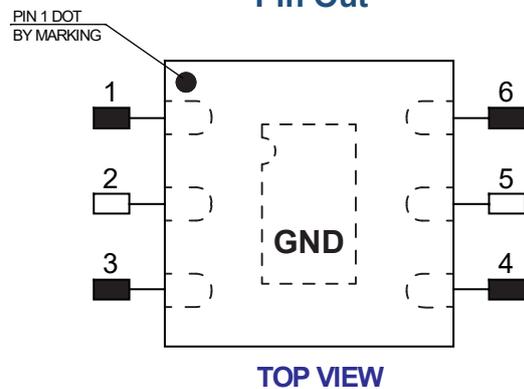
Outline Drawing



Land Pattern



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.
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Recommended Land Pattern Top View

Notes: All dimensions show in millimeters

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