

Preliminary Data Sheet

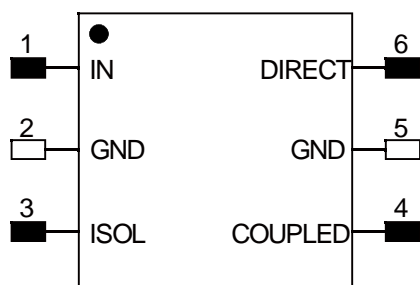
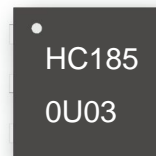
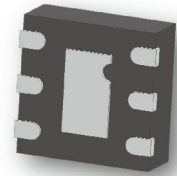
HC1850U03-030

90 Degree Hybrid
1.75 GHz-1.95 GHz



Features

- Small Size (2x2mm)
- Passive RF IC, no need external DC power supply
- Very Low Loss
- Tight Amplitude Balance
- High Isolation
- Low VSWR
- Good Repeatability
- Tape & Reel
- Operating Temperature: -40°C to +85°C
- 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 | 1750 | | 1950 | MHz |
| Insertion Loss (Above 3dB) | I _L | | 0.25 | 0.30 | dB |
| Isolation | Isol | 35 | 39 | | dB |
| Phase balance | ∅ _{bal} | | 1.0 | 1.5 | deg |
| Amplitude balance | A _{bal} | | 0.5 | 0.7 | dB |
| Return Loss | R _L | 28 | 32 | | dB |

Yantel Corporation

Add: 3rd Floor,Building3, 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

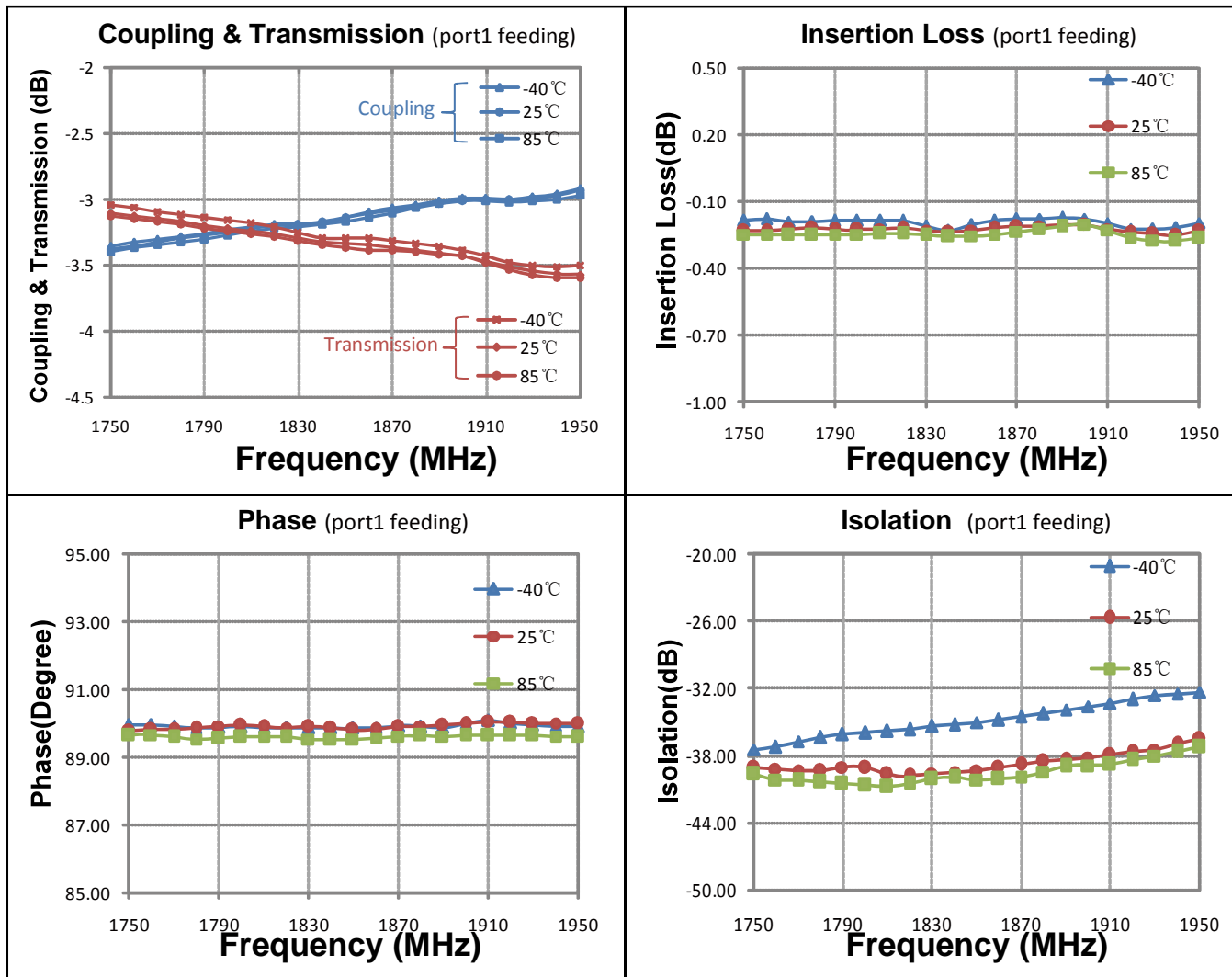
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Typical Performance (-40°C, 25°C, 85°C: 1750-1950 MHz)



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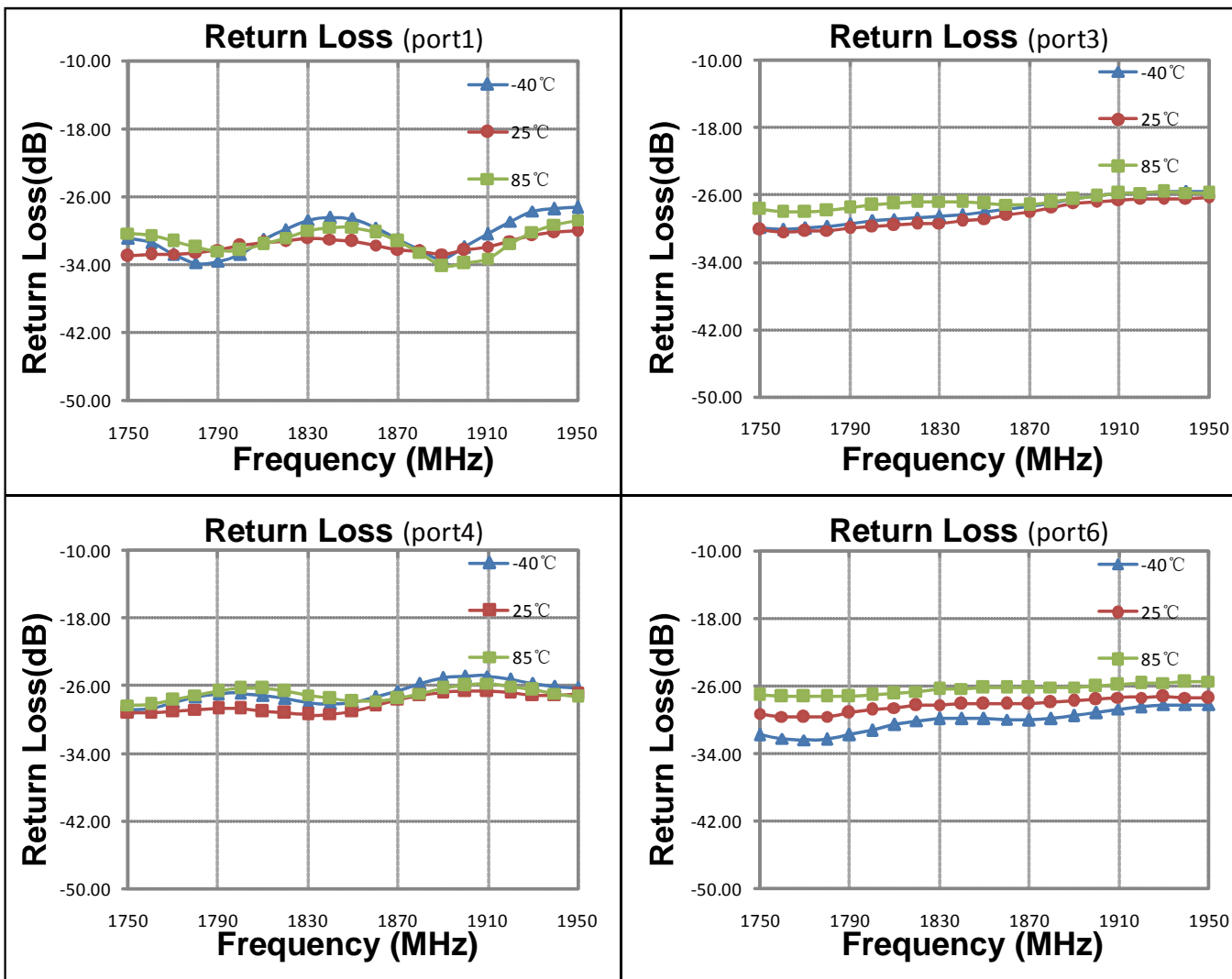
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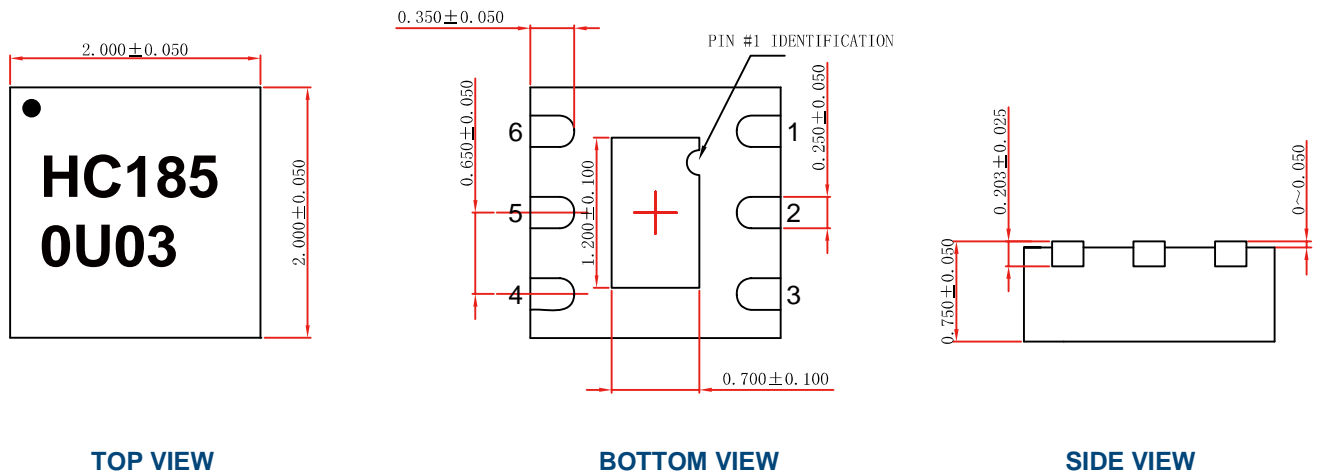
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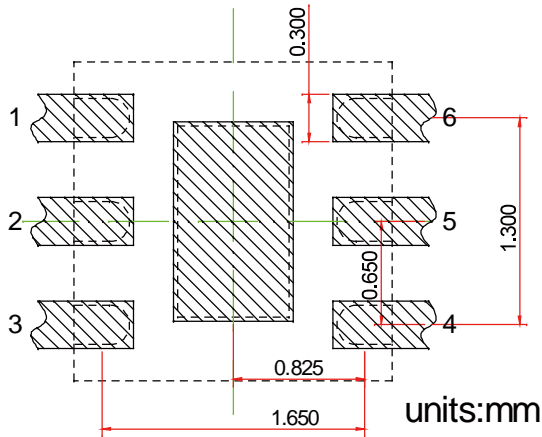
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Outline Drawing



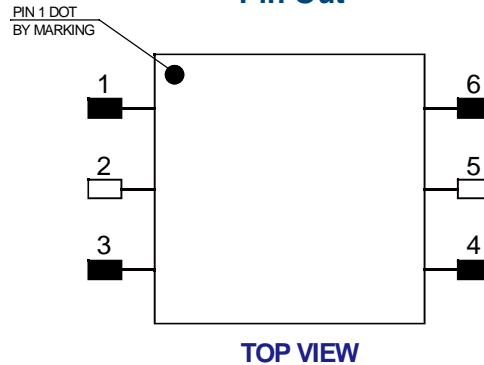
Land Pattern



Recommended Land Pattern Top View

Notes: All dimensions show in millimeters

Pin Out



Notes:

1. Require to add Capacitors of DC Blocker between Pins (with black color) and external circuit to prevent DC signal entry to guarantee 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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