ANTENNA COUPLER · DATASHEET

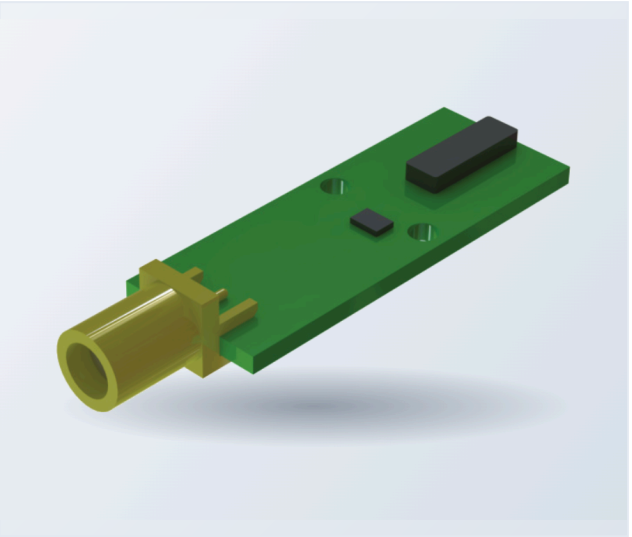
Dualband Antenna Coupler

MA009890 | 2.4 / 5 GHz | 50 Ω · SMA (f)

Bluelec MA009890 is a dualband antenna coupler for near-field testing of WLAN and Bluetooth antennas at 2.4 GHz and 5 GHz. It provides repeatable coupling across both bands from a single compact coupler.

- Covers 2.4 – 2.5 GHz and 5.15 – 5.85 GHz for WLAN, Bluetooth, BLE, Zigbee, and ISM-band testing.
- Great near-field coupling across both frequency ranges.
- Compact, low-profile package, easy to integrate.
- Nominally linear coupling field with broad angular near-field response.

With its slim footprint and 50 Ω SMA interface, the coupler integrates easily into automated handlers, R&D benches, and service-center fixtures for fast dualband antenna verification.



ELECTRICAL

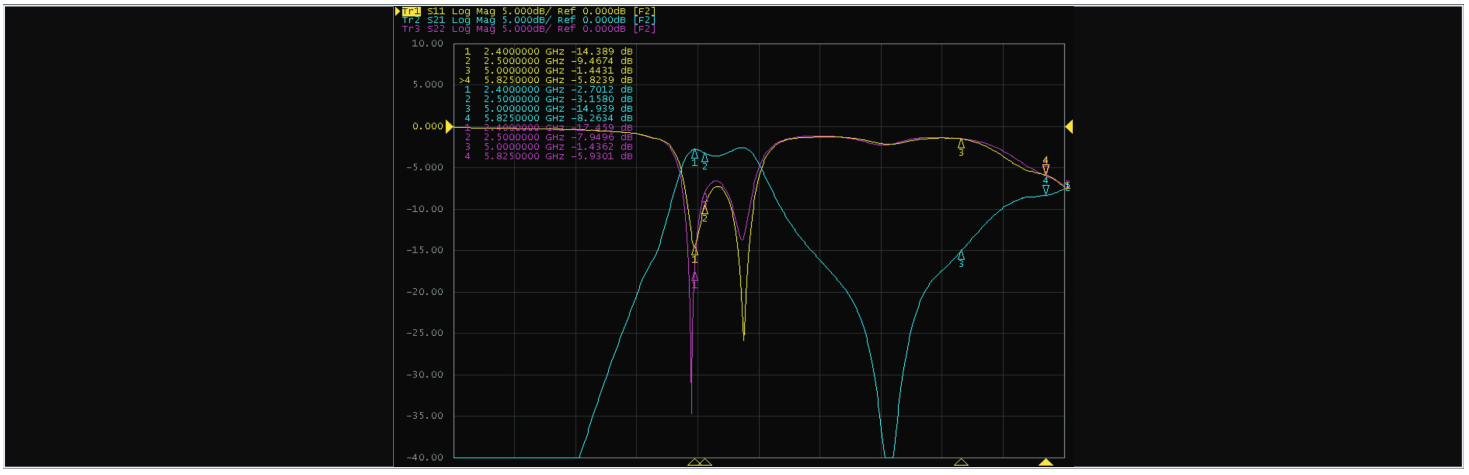
Frequency range 1	**2.4 – 2.5 GHz**
Frequency range 2	**5.15 – 5.85 GHz**
Terminal impedance	**50 Ω**
Nominal polarization	**Linear**
Near-field coupling	**Broad angular response**

MECHANICAL

Dimensions	**44.55 × 13 × 6.35 mm (1.75 × 0.51 × 0.25 in)**
RF connector	**SMA (female)**
Mounting	**M2 plastic screws**
Compliance	**RoHS**

COUPLING RESPONSE

reference, no DUT · two identical couplers at 5 mm



ENVIRONMENTAL

Operating temperature	**0 – +60 °C**
Relative humidity	**15 – 95 % non-condensing**
Storage temperature	**−20 … +70 °C**

3D CAD models available on request via **sales@bluelec.com**

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Specifications subject to change without notice.