



EXPERIENCE

Owing to its 50 years experience, its high level of quality and its constant effort in R&D, RADIALL has become the EUROPEAN N°1 in coaxial connectors. Supported by its position, RADIALL has excelled in passive microwave components fields for more than 40 years.



A WIDE FIELD OF ACTIVITY

Specialized in passive microwave components, the RADIALL engineering staff develops and manufactures a wide range of coaxial standard devices including terminations, attenuators, couplers, coaxial detectors, coaxial switches, lightning protectors, rotary joints, covering a wide frequency spectrum from DC to 40 GHz.

CAPACITIES AND FACILITIES

The association inside the same plant of all the technical skills : R&D, industrialization, manufacturing and quality control enable RADIALL to produce a range of high performance and low cost devices for industrial applications as well as high reliability components for severe requirements in military and space fields.

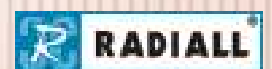


RESEARCH AND DEVELOPMENT

The increasing complexity of microwave systems requires more and more high performance components. To meet these requirements, the R&D department is constantly engaged in the development of new products as well as improvement on present products. Fitted out with microwave and mechanical CAD and with the latest generation of microwave test equipment up to 65 GHz, RADIALL uses state-of-the-art technology to optimize its products and to give the fastest response to the specific customer requirements.

QUALITY AND RELIABILITY

RADIALL has been committed to these two major requirements of passive microwave components for years. The ISO 9000 label awarded by BVQI is the best evidence of Quality Assurance interfaces at every stage of the product from designing to manufacturing.



COAXIAL TERMINATIONS



Low power

Average power : 0.5 to 3 Watts
Connectors : SMA, SMB, SMC, SMZ, BMA, QMA, SSMA, BNC, N, TNC, QN, 7/16
Frequency range : From DC up to 40 GHz
Impedance : 50 and 75



Medium power

Average power : 6 to 50 Watts
Connectors : SMA, BNC, N, TNC, 7/16
Frequency range : From DC up to 18 GHz
Impedance : 50



High power

Average power : 80 to 120 Watts
Connectors : SMA, N, TNC, 7/16
Frequency range : From DC up to 4 GHz
Impedance : 50



Cable load

Average power : 100 Watts
Connectors : SMA
Cable : .141 conformable
Frequency range : From DC up to 3 GHz
Impedance : 50

COAXIAL ATTENUATORS



Low power

Average power : 1 to 3 Watts
Connectors : SMA, SMB, SMC, BNC, N, TNC, QMA, 7/16
Frequency range : From DC up to 40 GHz
Attenuation : 0 to 60 dB (1 dB step up to 20 dB)



Medium power

Average power : 10 to 50 Watts
Connectors : SMA, BNC, N, TNC, 7/16
Frequency range : From DC up to 18 GHz
Attenuation : 3, 6, 10, 20, 30 dB



High power

Average power : 80 to 100 Watts
Connectors : SMA, N, TNC, 7/16
Frequency range : From DC up to 2 GHz
Attenuation : 3, 6, 10, 20, 30 dB

COAXIAL SWITCHES



Coaxial SPDT

Connectors : SMA, SMA 2.9, QMA, SMB, SMC, 1.6/5.6, N, TNC, BNC
Frequency range : From DC up to 40 GHz
Life : 10 000 000 cycles with SMA connectors
Configuration : Failsafe or Latching, 12-28 Volts, Self-Cut-Off, TTL Driver, Indicator contact



Coaxial SPDT reduced size

Connectors : SMA, SMA 2.9, QMA, SMB, SMC, 1.6/5.6
Frequency range : From DC up to 40 GHz
Life : 2 500 000 cycles with SMA connectors
Configuration : Failsafe or Latching, 12-28 Volts



Coaxial DPDT/Transfer relay

Connectors : SMA, SMA 2.9, QMA, SMB, SMC, 1.6/5.6, N, TNC, BNC
Frequency range : From DC up to 40 GHz
Life : 2 500 000 cycles with SMA connectors
Configuration : Failsafe or Latching, 12-28 Volts, Self-Cut-Off, TTL Driver, Indicator contact



Coaxial DP3T/Terminated SPDT

Connectors : SMA, SMA 2.9,
Frequency range : From DC up to 40 GHz
Life : 10 000 000 cycles with SMA connectors
Configuration : Failsafe or Latching, 12-28 Volts, Self-Cut-Off, TTL Driver, Indicator contact



Coaxial SPnT Switches

(3 to 12 positions)

Connectors : SMA, SMA 2.9, QMA, 1.6/5.6, N, TNC, BNC
Frequency range : From DC up to 40 GHz
Life : 5 000 000 cycles with SMA connectors
Configuration : Normally open or Latching, 12-28 Volts, Self-Cut-Off, TTL Driver, BCD Coded, Indicator contact



Coaxial SPnT Switches Reduced Size

(3 to 12 positions)

Connectors : SMA, SMA 2.9, QMA
Frequency range : From DC up to 26.5 GHz
Life : 2 500 000 cycles with SMA connectors
Configuration : Normally open or Latching, 12-28 Volts



Coaxial SPnT Switches Terminated (50)

(3 to 12 positions)

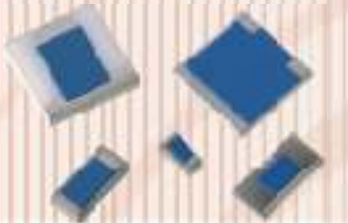
Connectors : SMA, SMA 2.9, QMA, 1.6/5.6, N, TNC, BNC
Frequency range : From DC up to 26.5 GHz
Life : 2 000 000 cycles with SMA connectors
Configuration : Normally open or Latching, 12-28 Volts, Self-Cut-Off, TTL Driver, BCD Coded, Indicator contact

SMT PRODUCTS



SMT Couplers

Type	: Standard and mini size, 3 dB 90° hybrid and directional
Frequency range	: from 0.9 to 4 GHz
Coupling	: 3, 6, 10 dB
Average power	: 40 to 100 Watts



SMT Terminations and Attenuators

Frequency range	: from DC to 18 GHz
Impedance	: 50
Average power	: 10 to 120 Watts
Attenuation	: Up to 20 dB

COAXIAL COUPLERS



Broadband Flat response octave band and directional

Connectors	: SMA female, N female
Frequency range	: From 0.15 up to 18 GHz
Coupling	: 6, 10, 20, 30 dB
Average power	: 20 to 500 Watts



3dB 90° Hybrid

Connectors	: SMA female, N female
Frequency range	: From 0.08 up to 18 GHz
Coupling	: 3 dB
Average power	: 30 to 500 Watts



High power directional

Connectors	: SMA female, TNC, N male or female
Frequency range	: From 0.9 up to 18 GHz
Coupling	: 10, 16, 20, 30, 40 dB
Average power	: 100 to 400 Watts



Power divider / combiner

Connectors	: SMA female
Frequency range	: From 1 up to 18 GHz
Type	: Wilkinson 2-Way type
Average power	: 5 Watts

OTHER COAXIAL COMPONENTS



Lightning protector

Type	: Quarter wave stub and gas discharge technology
Frequency range	: DC to 2.5 GHz (GDT) - 0.9 to 6 GHz (QWS)
Connector type	: 7/16, N, QN, TNC
Surge current	: 50 and 100KA



Detectors

Connectors RF input	: SMA male, N male
Connectors video output	: SMB male, SMA female, SMC male, Solder pin, BNC female
Frequency range	: From 0.01 up to 18 GHz
Polarity	: negative or positive
Low level Sensitivity	: > 500 mV/mW or > 1500 mV/mW



Rotary Joints

Connectors input	: SMA female, N male
Connectors output	: SMA female, N female
Frequency range	: From DC up to 18 GHz



Phase Shifters

Connectors	: SMA
Frequency range	: From DC up to 18 GHz
Phase variation	: 0 to 180°
Models	: Mechanical or dielectrical adjustment



DC Blocks

Connectors	: SMA
Frequency range	: From 0.01 up to 40 GHz
DC voltage	: 100 to 250 V



Monitor Tees

Connectors	: SMA
Frequency range	: From 0.01 up to 12.4 GHz
Nominal capacity	: 3.5 - 10 or 15000 pF
DC voltage	: 100V

CIVIL, MILITARY and SPACE APPLICATIONS

- › Mobile communications (GSM/PCN)
- › Broadcasting ground station
- › Radio communication
- › Civil and military communications
- › Measurements and tests
- › Instrumentations
- › Data communication
- › Radar and detection
- › Electronic warfare
- › Missiles
- › Avionic system
- › Space programs

CUSTOM DESIGN FOR SPECIAL APPLICATIONS

DC-18 GHz, 100 W, CW with TNC connector
for countermeasures airborne equipment



200 watts, 6-18 GHz, 3 dB and 2x20 dB high power.
Coupler developed for Airborne Electronic Warfare Equipment

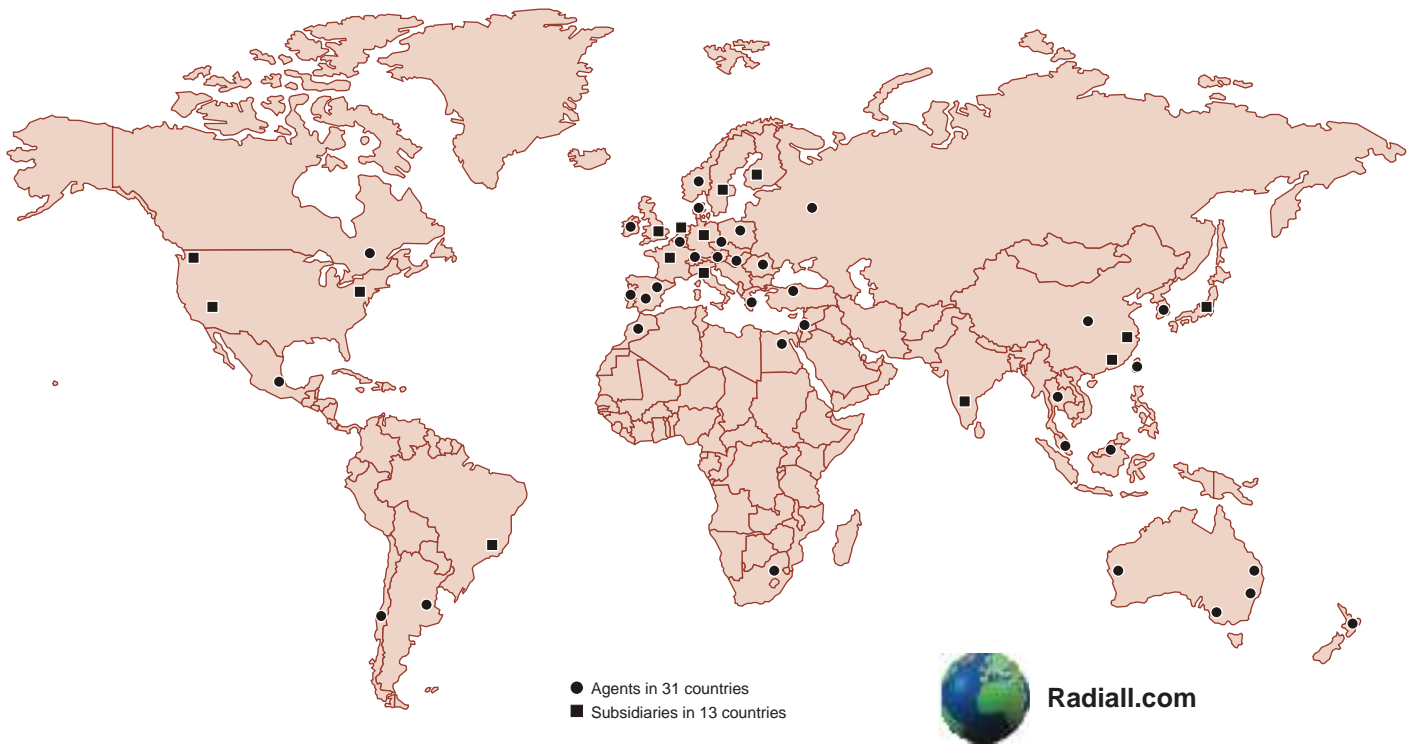
12 Watts, 18 GHz, miniature attenuator developed
with aluminium nitride thin film technology



DC-1GHz, SPDT, N connector for
Airborne military application



Another view of coaxial products for space use



● Agents in 31 countries
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USA - RADIALL (High Reliability Product)

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