

A New Solution for High-Power Termination

RADIALL BRAND NEW CABLE LOADS



Radiall expands its range of microwave component with the new type of termination. This Cable Load solution avoid excessive temperature near any sensitive component or printed circuit boards the heat coming from high power termination being sometimes critical for the electronics. A semi-rigid coaxial cable is used to bring the signal to the termination. The heat generated by the RF power is consequently dissipated far from the board thanks to conduction cooling to a heat sink or chassis of the equipment.

The length of the coaxial cable is customized according to your application (contact us).

This new Cable Load was designed using ALN substrate within an aluminum housing to achieve a good compromise between performance and conduction cooling level*. Radiall also offers a large range of attenuators and terminations using thick and thin film in house technology.

Characteristics

Electrical

| | |
|---------------|--------------|
| Impedance | : 50 ±5% |
| Average power | : 100 W |
| Frequency | : DC - 3 GHz |
| VSWR | : < 1.20 max |

Mechanical

| | |
|-----------------|--|
| Connector | : SMA male (consult us for other type) |
| Coupling torque | : 60 N.cm |
| Mating life | : 100 matings mini |
| Weight | : 20 gr |

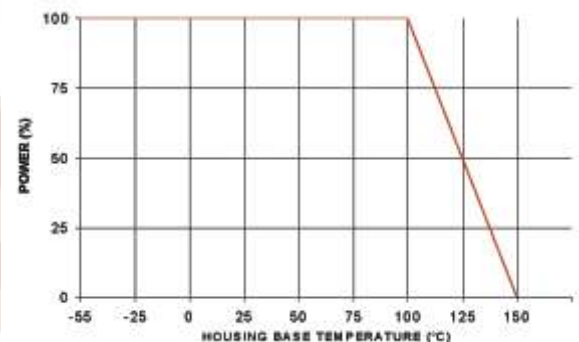
Materials

| | |
|----------------|-------------------------------|
| Substrate | : Aluminium nitride |
| Resistive film | : Ruthenium oxyde |
| Housing base | : AGS 6060 |
| Cable | : Conformable .141" |
| Connector body | : Stainless steel (Ni2 Au0.2) |
| Center contact | : Brass (Cu2.5 Au1.3) |
| Coupling nut | : Brass (Ni2 Au0.2) |

Environmental

| | |
|-----------------------------|------------------|
| Operating temperature range | : -40°C / +150°C |
| Storage temperature range | : -40°C / +150°C |

Power derating versus temperature

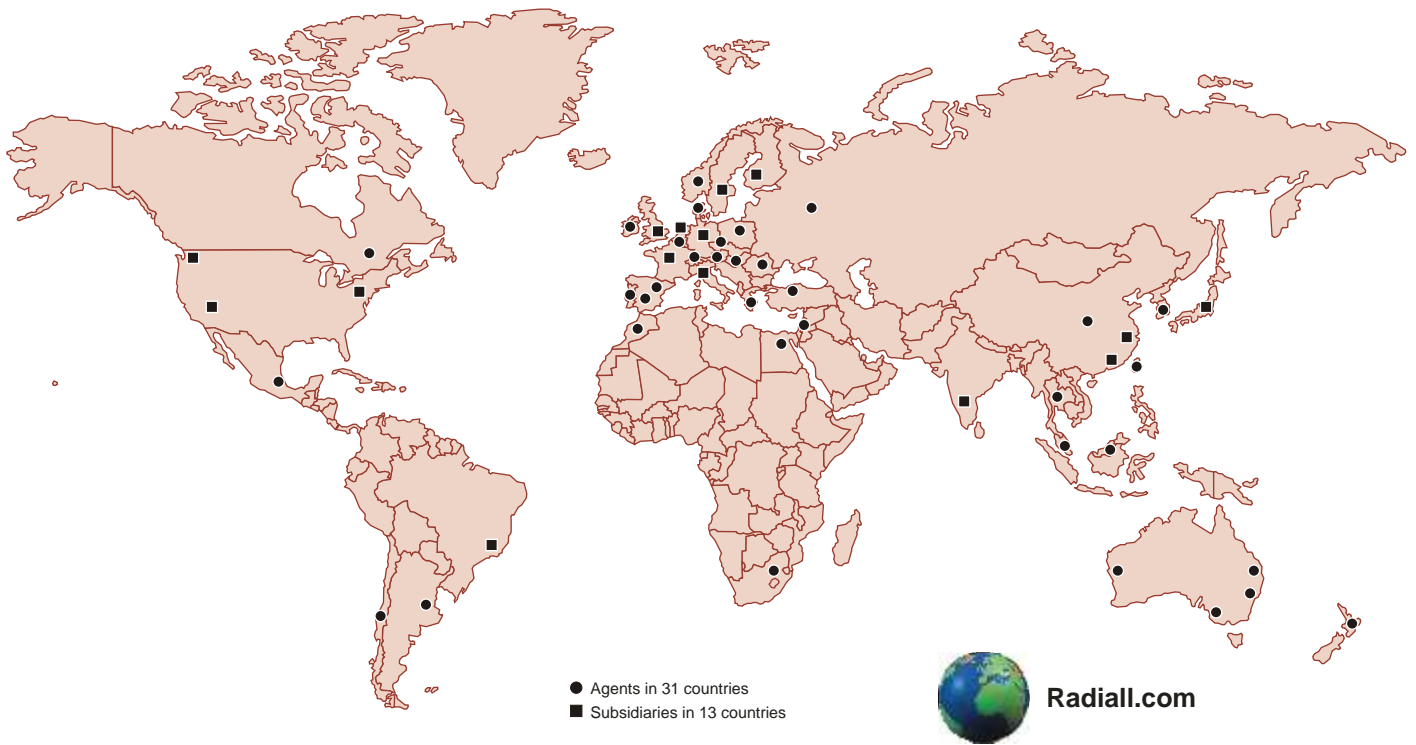


* Performance and power handling of the cable load is link to the good conduction cooling, the surface need to be free of scratches or burrs, (air gap will created a thermal resistance between the housing base and the heat sink), however heat transfer can be optimized with a coat of thermal grease, flatness of the chassis or heat sink need to be better than 0.03mm, suggested roughness should be Ra 0.8, mounting device on the heat sink has to be done with 4 xM3 screws.

ISO 9001 APPROVED



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Radiall.com

RADIALL WORLDWIDE LOCATIONS

EUROPE

France - RADIALL HEADQUARTERS

101, Rue Ph. Hoffmann - 93116 ROSNY sous BOIS (Paris)
 Tel. : +33 1 49 35 35 35 Fax : +33 1 48 54 63 63
 E-Mail : info@radiall.com

Finland - RADIALL FIN

Pilot Business Park - Lentokatu 2 - FIN-90460 OULUNSAALO
 Tel. : +358 852 70 130 Fax : +358 852 70 105
 E-Mail : info@radiall.fi

Germany - RADIALL GmbH

Carl-Zeiss Str. 10 Postfach 200143 - D63307 RÖDERMARK (Frankfurt)
 Tel. : +49 60 74 91 07 0 Fax : +49 60 74 91 07 70
 E-Mail : info@radiall.de
 Regional office : Munich

Italy - RADIALL Elettronica S.R.L.

Via Concordia, 5 - I20090 ASSAGO MILANO
 Tel. : +39 02 48 85 121 Fax : +39 02 48 84 30 18
 E-Mail : radiall@tin.it
 Regional office : Roma

Netherlands - RADIALL B.V.

Postbus 64 - 3870 CB HOEVELAKEN
 Tel. : +31 33 253 40 09 Fax : +31 33 253 45 12
 E-Mail : info@radiall.nl

Sweden - RADIALL A.B.

Sjöängsvägen 2 - SE-192 72 SOLLENTUNA (Stockholm)
 Tel. : +46 844 434 10 Fax : +46 875 449 16
 E-Mail : info@radiall.se

U.K. - RADIALL Ltd

10, Perivale Industrial Park, Horsenden Lane south
 PERIVALE Middlesex UB6 7RL (London)
 Tel. : +44 208 991 7700 Fax : +44 208 991 7769
 E-Mail : info@radiall.co.uk

AMERICA

USA - RADIALL (RF Interconnect Product)

*RF Microwave Connectors & Cable Assemblies, Microwave Switches & Devices,
 Fiber Optic Connectors*
 102 W. Julie Drive - TEMPE, Arizona 85283
 Tel. : +1 480 730 5700 Fax : +1 480 730 5800
 E-Mail : sales@radiallusa.com

USA - RADIALL (Antenna Product)

Antennas for Automotive, Military & Wireless communications (LARSEN Product)
 3611 NE 112nd Avenue - VANCOUVER, Washington 98682
 Tel. : +1 360 944 7551 Fax : +1 360 944 7556
 E-Mail : info@radiallarsen.com

USA - RADIALL (High Reliability Product)

Multicontact Connectors, Filtered Connectors (JERRIK Product)
 102 W. Julie Drive - TEMPE, Arizona 85283
 Tel. : +1 480 730 5700 Fax : +1 480 730 5800
 E-Mail : sales@radialljerrick.com

Brazil - RADIALL do Brasil

Largo do Machado, 54 sala 706 - Catete
 22221-020 RIO DE JANEIRO
 Tel. : +55 21 2558 05 76 Fax : +55 21 2245 97 63
 E-Mail : hubertm@radiall.com.br

ASIA

China - SHANGHAI RADIALL Electronic Co., Ltd

N° 390 Yong He Road 200072 - SHANGHAI
 Tel. : +86 21 66 52 37 88 Fax : +86 21 66 52 11 77
 E-Mail : radialls@online.sh.cn

Japan - NIHON RADIALL KK

1-3-10, Higashi nihonbashi, Chuokku, TOKYO 103-0004
 Tel. : +81 3 3866 23 90 Fax : +81 3 3866 23 91
 E-Mail : emiko@radiall.co.jp

HongKong - RADIALL Electronics Ltd

Elite Industrial Centre, Room 212, 2/F
 N° 883 Cheung Sha Wan Road - KOWLOON HONG KONG
 Tel. : +852 29 59 38 33 Fax : +852 29 59 26 36
 E-Mail : info@radiall.com.hk

India - RADIALL PROTECTRON

25 D, II Phase, Peenya Industrial Area - BANGALORE 560058
 Tel. : +91 80 83 95 271 Fax : +91 80 83 97 228
 E-Mail : radiall@vsnl.com

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