

301-KAP50 S



Radiation resistant 50 Ohm coaxial cable with similar size of RG178

Up to 300°C continuous use, for frequencies up to the 1 GHz range

Conductor:

Silver plated copper conductor, multi strand

7 x 0.08mm

~32AWG 7/40

Diameter

0.24mm

Area

0.035mm²

Resistivity @20°C (inner conductor)

558 Ohm/km

Insulation

Kapton

Screen, Silver plated copper, coverage

>95%

Outer insulation

Kapton

Total Diameter

1.6mm (+/-0.1)

(without outer insulation ~1.35mm, without screen ~ 1.0mm)

Voltage rating, conductor to screen

>7.5KV DC (in vacuum)

Disruptive discharge voltage

>10KV DC

Max. temperature

300°C

Impedance

50 Ohm (+/-10%)

Capacitance

100pF/m (+/-10)

Resistivity conductor to screen

>10GOhm/m @ 5KV

Damping: 0.47db/m @100MHz, 0.86db/m @200MHz 1.36db/m @500MHz,..2.5db/m @1GHz *)

Radiation resistant up to

1000 Mrad

Weight

~ 5g/m

Vacuum Level

typ. 10⁻¹² mbar is achievable

*) : Sample with SMA connectors on both ends, typical values

Typical values for current

Room Temperature	~ 0.5 A
up to 250°C	~ 0.4 A
up to 280°C	~ 0,25 A
up to 290°C	~ 0.2 A

The maximum current is dependant on the installation, above values are typical calculated values for single wires, not covered.

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