

## 301-KAPM-060-PAIR1

**KAP  
301**

**Radiation resistant twisted pair cable, screened with outer insulation  
Up to 300 °C  
This cable is ideal for signal applications and medium power use**

Conductor:	Silver plated copper conductor, multi strand
2 conductors 19 x 0.127 mm	24AWG 19/36
Conductor Diameter	0.64 mm
Area	0.24 mm <sup>2</sup>
Resistivity @20 °C	79.7 Ohm/km
Twisted Pair, one wire marked with glass yarn	~20 mm lay
Insulation	Kapton
Overall Diameter	2.24 mm
Diameter without screen	~1.7 mm
Screen: Silver plated copper, coverage	>85%
Voltage rating	7.5 kV DC (in vacuum)
Disruptive discharge Voltage	>10 kV DC
Min. Temperature	4 K
Max. temperature	300 °C
Radiation resistant up to	1000 Mrad
Weight	10,5 g/m
Vacuum Level	typ. 10 <sup>-12</sup> mbar is achievable
Capacitance:	
Conductor-Conductor	~128 pF/m
Conductor-Screen	~215 pF/m
Impedance	~66 Ohm (calculated value)

Typical values for current per conductor:

Room Temperature	~ 2.5 A
up to 250 °C	~ 2.3 A
up to 280 °C	~ 1.6 A
up to 290 °C	~ 1.2 A

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

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*Conductors, the right one  
is marked with glass yarn*