

## 301-KAPM-025-PAIR1



**Radiation resistant twisted pair cable, screened with outer insulation  
Up to 300 °C**

**This very thin cable is ideal for signal applications where space is limited  
One wire marked with glass yarn**

Conductor	Silver plated copper conductor, multi strand
2 conductors 7 x 0.08 mm	32AWG 7/40
Conductor Diameter	0.24 mm
Area	0.035 mm <sup>2</sup>
Resistivity @20 °C	548 Ohm/km
Twisted Pair, one wire marked with glass yarn	~20 mm lay
Insulation	Kapton
Overall Diameter	1.5 (+/-0.15) mm
Diameter without screen	~1 mm
Screen: Silver plated copper, coverage	>85%
Voltage rating	5 kV DC (in vacuum)
Disruptive discharge Voltage	>10 kV DC
Min. Temperature	4 K
Max. Temperature	300 °C
Weight	~4 g/m
Vacuum Level	typ. 10 <sup>-12</sup> mbar is achievable
Capacitance:	
Conductor-Conductor	~77 pF/m
Conductor-Screen	~140 pF/m
Impedance	~83 Ohm (calculated value)

Typical values for current per conductor:

Room Temperature	~ 0.5 A
up to 250 °C	~ 0.4 A
up to 280 °C	~ 0.3 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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