

Flexible RF cable K_03252_D-03

Description

K: RF cables with PTFE/FEP/PFA dielectrics

RG142 alternative, 50 Ohm, 6 GHz, 200°C, ø4.95 mm, FEP jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.95 mm
Dielectric	FEP (Fluorinated ethylene propylene)		2.95 mm
Outer conductor	Copper, Silver plated	Braid, 96%	3.6 mm
Outer conductor	Copper, Silver plated	Braid, 94 %	4.2 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 7032 - gr	4.95 mm +/- 0.1

Print: HUBER+SUHNER K 03252 D-03 50 Ohm (production order number)

Electrical Data

Impedance	50 Ω +/- 1
Operating Frequency	6 GHz
Capacitance	94 pF/m
Velocity of signal propagation	69 %
Signal delay	4.75 ns/m
Screening effectiveness	≥ 82 dB (up to 6 GHz)
Operating voltage	≤ 1.7 kV _{rms} (at sea level)
Test voltage	3.4 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	6.4 kg/100 m
Min. bending radius	static 30 mm 50 mm

Environmental Data

Temperature range	-65 °C ... +200 °C
Installation temperature	-20 °C... +60 °C
Flame propagation test	IEC 60332-3,
Halogen free	No
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant
2000/53/EC (ELV)	compliant
2012/19/EU (WEEE)	no special marking needed

Additional Information

Ordering Information

Order as	K_03252_D-03
----------	--------------

Remarks

(For details refer to the HUBER+SUHNER RF CABLES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group	U9 3 mm / 50 Ohm
-------------	------------------

Flexible RF cable K_03252_D-03

Matrix typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]

Coefficients:

a = 0.375

b = 0.0713

f_{max} = 6

P at 1GHz = 490

Frequency (GHz)	Nom. attenuation (dB / m) sea level 25° C ambient temperature	Nom. attenuation (dB / ft) sea level 25° C ambient temperature	Max. CW power (W) sea level 40° C ambient temperature
0,3	0,23	0,069	895
0,6	0,33	0,102	633
0,9	0,42	0,128	517
1,2	0,5	0,151	447
1,5	0,57	0,173	400
1,8	0,63	0,192	365
2,1	0,69	0,211	338
2,4	0,75	0,229	316
2,7	0,81	0,246	298
3,0	0,86	0,263	283
3,3	0,92	0,279	270
3,6	0,97	0,295	258
3,9	1,02	0,310	248
4,2	1,07	0,326	239
4,5	1,12	0,340	231
4,8	1,16	0,355	224
5,1	1,21	0,369	217
5,4	1,26	0,383	211
5,7	1,3	0,397	205
6,0	1,35	0,410	200