Data Sheet

Coaxial Cable
MULTIFLEX_86

Description

The flexible microwave cable

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.47 mm
Dielectric	PTFE (Polytetrafluoroethylene)		1.48 mm
Outer conductor	Copper, Silver plated	wrapped Foil, 100%	1.71 mm
Outer conductor	Multi-end: Copper - Tinned	Braid, 99.4 %	2.11 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 5015 - bl	2.65 mm +/- 0.1

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Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	40 GHz
Capacitance	95 pF/m
Velocity of signal propagation	70.6 %
Signal delay	4.72 ns/m
Insulation resistance	≥ 1 x 10^8 MΩm
Min. screening effectiveness	≥ 90 dB (up to 18 GHz)
Max. operating voltage	≤ 1.5 kV_{rms} (at sea level)
Test voltage	3.5 kV_{rms} (50 Hz/1 min)

Mechanical Data

Weight		2.1 kg/100 m
Min. bending radius	static	6 mm
	dynamic	20 mm

Environmental Data

Temperature range	-65 °C... +165 °C
Installation temperature	-20 °C... +60 °C
Flammability	IEC 60332-1, UL 1581 § 1080 (VW-1),
2011/95/EC (RoHS)	compliant

Additional Information

Ordering Information

Order as	MULTIFLEX_86

Remarks

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

Suitable Connectors

Cable group	Y11 2 mm / 50 Ohm

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Matrix typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]
Coefficients:

a = 0.71702	b = 0.02892	f_{max} = 40	P at 1GHz = 140

Frequency	Nom. attenuation	Nom. attenuation	Max. CW power
(GHz)	(dB / m)	(dB / ft)	(watt)
	sea level 25° C ambient temperature	sea level 25° C ambient temperature	sea level 40° C ambient temperature
2.0	1.07	0.327	99
4.0	1.55	0.472	70
6.0	1.93	0.588	57
8.0	2.26	0.689	49
10.0	2.56	0.779	44
12.0	2.83	0.863	40
14.0	3.09	0.941	37
16.0	3.33	1.015	35
18.0	3.56	1.086	33
20.0	3.79	1.154	31
22.0	4.0	1.219	30
24.0	4.21	1.282	29
26.0	4.41	1.343	27
28.0	4.6	1.403	26
30.0	4.79	1.461	26
32.0	4.98	1.518	25
34.0	5.16	1.574	24
36.0	5.34	1.629	23
38.0	5.52	1.682	23
40.0	5.69	1.735	22