Data Sheet

Coaxial Cable
MULTIFLEX_141

Description

The flexible microwave cable

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.92 mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.93 mm
Outer conductor	Copper, Silver plated	wrapped Foil, 100%	3.21 mm
Outer conductor	Multi-end: Copper - Tinned	Braid, 83 %	3.53 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 5015 - bl	4.14 mm +/- 0.1

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Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	33 GHz
Capacitance	95 pF/m
Velocity of signal propagation	70.6 %
Signal delay	4.7 ns/m
Insulation resistance	≥ 1 x 10^8 MΩm
Min. screening effectiveness	≥ 90 dB (up to 18 GHz)
Max. operating voltage	≤ 1.9 kV_{rms} (at sea level)
Test voltage	3.8 kV_{rms} (50 Hz/1 min)

Mechanical Data

Weight		4.5 kg/100 m
Min. bending radius	static	10 mm
	dynamic	40 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_141

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	Y17 3 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 =	0.3732	b =	0.0279	f_{max} =	33	P at 1GHz =	373

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
1.65	0.53	0.160	290
3.3	0.77	0.235	205
4.95	0.97	0.295	168
6.6	1.14	0.348	145
8.25	1.3	0.397	130
9.9	1.45	0.442	119
11.55	1.59	0.485	110
13.2	1.72	0.526	103
14.85	1.85	0.565	97
16.5	1.98	0.602	92
18.15	2.1	0.639	88
19.8	2.21	0.675	84
21.45	2.33	0.709	81
23.1	2.44	0.743	78
24.75	2.55	0.776	75
26.4	2.65	0.809	73
28.05	2.76	0.841	70
29.7	2.86	0.872	68
31.35	2.96	0.903	67
33.0	3.06	0.934	65