Data Sheet

HUBER+SUHNER

Flexible microwave cable MULTIFLEX_86

Description

Multiflex: Flexible alternatives to semi-rigid microwave cables

RG405 dimension, 50 Ohm, 40 GHz, 165°C, ø2.65 mm, FEP

jacket



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

Print: HUBER+SUHNER MULTIFLEX 86 (PA no.)

Electrical Data

Impedance
Operating Frequency
Capacitance

Velocity of signal propagation

Signal delay

Weight

Screening effectiveness
Operating voltage
Test voltage

Mechanical Data

Min. bending radius

dynamic

static

50 Ω +/- 2 40 GHz 95 pF/m 70.6 % 4.72 ns/m

 \geq 90 dB (up to 18 GHz) \leq 1.5 kV_{rms} (at sea level) 3.5 kV_{rms} (50 Hz/1 min)

2.1 kg/100 m 6 mm

20 mm

Environmental Data

Temperature range $-65 \,^{\circ}\text{C} \dots +165 \,^{\circ}\text{C}$ Installation temperature $-20 \,^{\circ}\text{C} \dots +60 \,^{\circ}\text{C}$

Flame propagation test IEC 60332-1, UL 1581 § 1080 (VW-1)

 Halogen free
 No

 2011/65/EU (RoHS - including
 compliant

 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 MULTIFLEX_86

Remarks

(For details refer to the HUBER+SUHNER RF CABLES 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)	(W)
	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

HUBER+SUHNER is certified according to ISO 9001, ISO 14001, ISO/TS 16949 and IRIS

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