Data Sheet

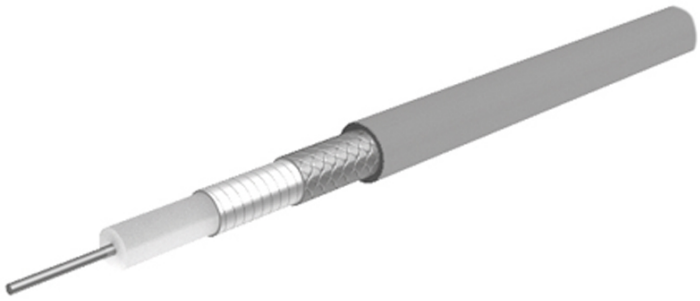
HUBER+SUHNER

Flexible microwave cable
SUCOFLEX_103 Item: 22510857 Only as Assembly

Description

SUCOFLEX 100: The flexible, high-performance microwave assemblies

50 Ohm, 33 GHz, 165°C, ø4.6 mm, FEP jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	
Dielectric	PTFE (Polytetrafluoroethylene)		
Outer conductor	Copper, Silver plated	wrapped Foil, 100%	
Outer conductor	Copper, Silver plated	Braid	
Jacket	FEP (Fluorinated ethylene propylene)	RAL 5000 - bl	4.6 mm

Electrical Data

Impedance		50 Ω
Operating Frequency		33 GHz
Capacitance		87 pF/m
Velocity of signal propagation		77 %
Signal delay		4.3 ns/m
Screening effectiveness		≥ 90 dB (up to 18 GHz)
Operating voltage		≤ 2 kV_{rms} (at sea level)

Mechanical Data

Weight		5.3 kg/100 m
Min. bending radius	static	13 mm
	dynamic	22 mm

Environmental Data

Temperature range	-55 °C ... +165 °C
Flame propagation test	MIL-T-87104 § 4.6.4.8,
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

Remarks

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

Suitable Connectors

Cable group	U98 SUCOFLEX

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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 =	0.2836	b =	0.0071	f_{max} =	33	P at 1GHz =	615

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
1.65	0.38	0.115	479
3.3	0.54	0.164	339
4.95	0.67	0.203	276
6.6	0.78	0.236	239
8.25	0.87	0.266	214
9.9	0.96	0.293	195
11.55	1.05	0.319	181
13.2	1.12	0.343	169
14.85	1.2	0.365	160
16.5	1.27	0.387	151
18.15	1.34	0.408	144
19.8	1.4	0.427	138
21.45	1.47	0.447	133
23.1	1.53	0.465	128
24.75	1.59	0.484	124
26.4	1.64	0.501	120
28.05	1.7	0.518	116
29.7	1.76	0.535	113
31.35	1.81	0.552	110
33.0	1.86	0.568	107

Waiver: Fact and figures herein are for information only and do not represent any warranty of any kind.