

SUCOFLEX_550_S

Description

SUCOFLEX 500: The phase stable, low loss assemblies for flexible applications

High-flexible, 50 Ohm, 50 GHz, 165°C, ø6.1 mm, PTFE jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand, Low-loss	
Dielectric	PTFE (Polytetrafluoroethylene)		
Outer conductor	Copper, Silver plated	wrapped Foil, 100%	
Outer conductor	Copper, Silver plated	Braid	
Jacket	FEP (Fluorinated ethylene propylene)		
Armor: Steel wire helix (Spiral)	Steel		
Armor: Steel wire	Steel	Braid	
Jacket	PTFE (Polytetrafluoroethylene)	RAL 5023 - bl	6.1 mm

Electrical Data

Impedance	50 Ω
Operating Frequency	50 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	≤ 1.2 kV _{rms} (at sea level)

Mechanical Data

Min. bending radius	static	25.4 mm
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Environmental Data

Temperature range	-55 °C ... +165 °C
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 SUCOFLEX_550_S (available only as assembly)

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

SUCOFLEX_550_S

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

Coefficients:

a = 0.4255

b = 0.01

$f_{max} = 50$

P at 1GHz = 235

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
2,5	0,7	0,213	149
5,0	1,0	0,305	105
7,5	1,24	0,378	86
10,0	1,45	0,441	74
12,5	1,63	0,497	66
15,0	1,8	0,548	61
17,5	1,95	0,596	56
20,0	2,1	0,641	53
22,5	2,24	0,684	50
25,0	2,38	0,725	47
27,5	2,51	0,764	45
30,0	2,63	0,802	43
32,5	2,75	0,838	41
35,0	2,87	0,874	40
37,5	2,98	0,908	38
40,0	3,09	0,942	37
42,5	3,2	0,975	36
45,0	3,3	1,007	35
47,5	3,41	1,039	34
50,0	3,51	1,069	33