DATA SHEET

High-flexible armoured, 50 Ohm, 50 GHz, 85°C, ø7.7 mm, PUR jacket

SUCOFLEX_550_EA

Properties

- Applicable up to 50 GHz
- High phase- and amplitude stability with flexure and movement
- Excellent insertion and return loss
- Precise and repeatable measurements
- Long life time - lower measurement cost
- RS - Rotary Swaged centre conductor

Construction			
Component	**Material**	**Detail**	**Diameter**
Centre conductor	Copper, Silver plated	Strand, Rotary swaged	
Dielectric	PTFE (Polytetrafluoroethylene)		
Outer conductor	Copper, Silver plated	Wrapped foil, 100%	
Outer braid	Copper, Silver plated	Braid	
Jacket	PUR (Polyurethane)		
Armour	Steel	Wire helix (Spiral)	
Armour	Steel	Braid	
Jacket	PUR (Polyurethane)	RAL 5009 - bl	7.7 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 at frequency 0.1 GHz ... 18GHz
Insulation resistance	100000000 MΩ*m
Operating Voltage (at sea level)	≤ 1.2 kVrms

Mechanical data	
Weight	approx. 111 g/m
Static bending radius	≥ 20 mm
Dynamic bending radius	≥ 40 mm

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Environmental data	
Operation temperature	-40 °C ... 85 °C
Fire characteristics	contains halogene

Additional Information
Only available as cable assembly, not sold as bulk

Suitable connectors	
Cable group	U98

Power Matrix			
Calculation: typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]			
a coefficient typical =	**0.4255**	b coefficient typical =	**0.01**
fmax =	**50.0**	P at 1 GHz =	**180.0**
Frequency	**Nom. attenuation**	**Nom. attenuation**	**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
0.20	0.192	0.059	402
0.40	0.273	0.083	285
0.60	0.336	0.102	232
0.80	0.389	0.119	201
1.00	0.435	0.133	180
1.20	0.478	0.146	164
1.40	0.517	0.158	152
1.60	0.554	0.169	142
1.80	0.589	0.180	134
2.00	0.622	0.190	127
4.00	0.891	0.272	90
6.00	1.102	0.336	73
8.00	1.283	0.391	64
10.00	1.446	0.441	57
20.00	2.103	0.641	40
40.00	3.091	0.942	28
50.00	3.509	1.070	25

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DOCUMENT PIM-P30644 / Date of publication: 05.11.2024 / uncontrolled copy