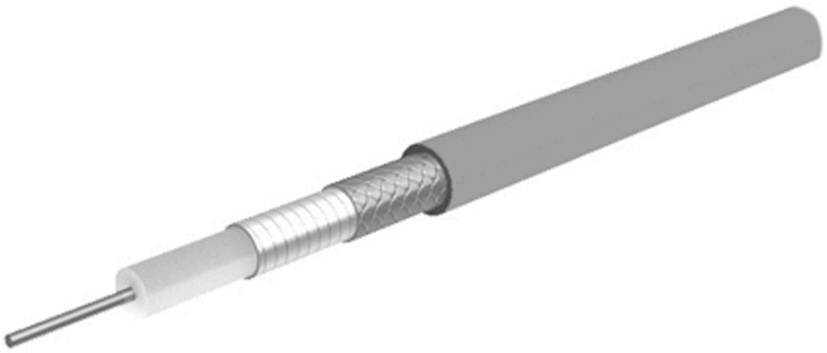
DATA SHEET

Flexible, 50 Ohm, 18 GHz, 165°C, ø7.9 mm, FEP jacket

SUCOFLEX_106

Properties

- Applicable up to 18 GHz
- Excellent insertion and return loss
- Extremely reliable and robust
- A wide range of cables, connectors and armours
- MIL qualified



Construction			
Component	**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 5015 - bl	7.9 mm

Electrical data	
Impedance	50 Ω +/-1Ω
Operating frequency	≤ 18 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)	≤ 3.8 kVrms

Mechanical data	
Weight	approx. 145 g/m
Static bending radius	≥ 24 mm
Dynamic bending radius	< 40 mm

Environmental data	
Operation temperature	-55 °C ... 165 °C
Flame propagation standard	MIL-T-87104 § 4.6.4.8
Fire characteristics	contains halogene

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Suitable connectors	
Cable group	U98

Ordering information		
Item number	Item description	Available as assembly only
22511150	SUCOFLEX_106	Yes

Power Matrix			
Calculation: typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]			
a coefficient typical =	**0.15**	b coefficient typical =	**0.0071**
fmax =	**18.0**	P at 1 GHz =	**1582.0**
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	0.069	0.021	3537
0.40	0.098	0.030	2501
0.60	0.120	0.037	2042
0.80	0.140	0.043	1769
1.00	0.157	0.048	1582
1.20	0.173	0.053	1444
1.40	0.187	0.057	1337
1.60	0.201	0.061	1251
1.80	0.214	0.065	1179
2.00	0.226	0.069	1119
4.00	0.328	0.100	791
6.00	0.410	0.125	646
8.00	0.481	0.147	559
10.00	0.545	0.166	500
18.00	0.764	0.233	373

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