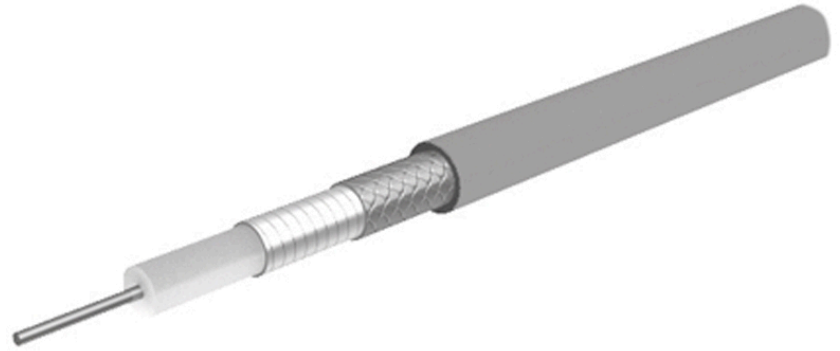


Flexible, 50 Ohm, 46 GHz, 165°C, Ø4 mm, FEP jacket

SUCOFLEX_102

Properties

- Applicable up to 46 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	4mm

Electrical data	
Impedance	50 Ω
Operating frequency	≤ 46 GHz
Capacitance	87 pF
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)	≤ 1.4 kV
Phase vs temperature	-55 ... 125°C

Mechanical data	
Weight	approx. 40 g/m
Static bending radius	≥ 12 mm
Dynamic bending radius	< 20 mm

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SUCOFLEX_102

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

Suitable connectors	
Cable group	U98

Ordering information		
Item number	Item description	Available as assembly only
22511794	SUCOFLEX_102	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 =	0.37	b coefficient typical =	0.0071
fmax =	46.0	P at 1 GHz =	394.0
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
0.20	0.167	0.051	881
0.40	0.237	0.072	623
0.60	0.291	0.089	509
0.80	0.337	0.103	441
1.00	0.377	0.115	394
1.20	0.414	0.126	360
1.40	0.448	0.137	333
1.60	0.479	0.146	311
1.80	0.509	0.155	294
2.00	0.537	0.164	279
4.00	0.768	0.234	197
6.00	0.949	0.289	161
8.00	1.103	0.336	139
10.00	1.241	0.378	125
20.00	1.797	0.548	88
40.00	2.624	0.800	62
46.00	2.836	0.864	58

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