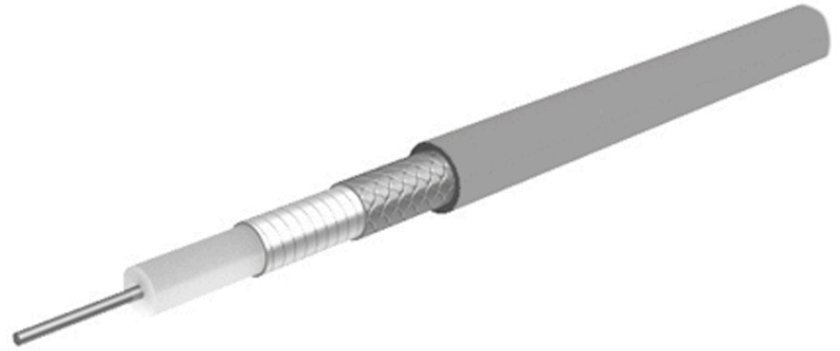


Flexible, 50 Ohm, 46 GHz, 85°C, Ø4 mm, PUR jacket

SUCOFLEX_102_E

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	PUR (Polyurethane)	RAL 5009 - 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

Mechanical data	
Weight	approx. 35 g/m
Static bending radius	≥ 12 mm
Dynamic bending radius	< 20 mm

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

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Suitable connectors	
Cable group	U98

Ordering information		
Item number	Item description	Available as assembly only
22511795	SUCOFLEX_102_E	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 =	240.0
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	537
0.40	0.237	0.072	379
0.60	0.291	0.089	310
0.80	0.337	0.103	268
1.00	0.377	0.115	240
1.20	0.414	0.126	219
1.40	0.448	0.137	203
1.60	0.479	0.146	190
1.80	0.509	0.155	179
2.00	0.537	0.164	170
4.00	0.768	0.234	120
6.00	0.949	0.289	98
8.00	1.103	0.336	85
10.00	1.241	0.378	76
20.00	1.797	0.548	54
40.00	2.624	0.800	38
46.00	2.836	0.864	35

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