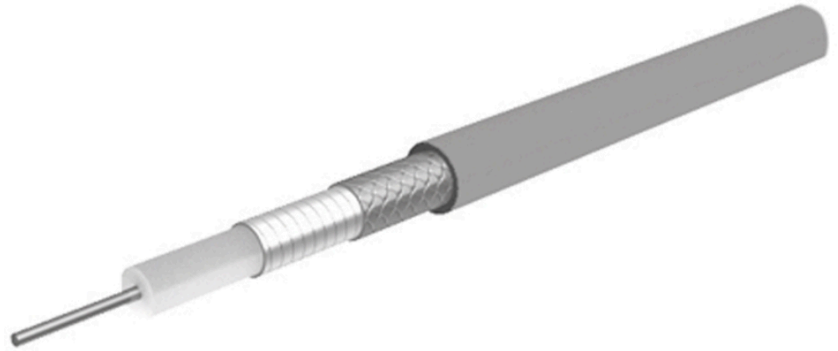


Flexible (RG405) 50 Ohm, 40 GHz, 165°C, ø2.65 mm, FEP jacket

MULTIFLEX_86

Properties

- Flexible alternative to semi-rigid cables
- Wide temperature range
- Suitable for use in applications up to 40 GHz



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.47 mm
Dielectric	PTFE (Polytetrafluoroethylene)		1.48 mm
Outer conductor	Copper, Silver plated	Wrapped foil, 100%	1.71 mm
Outer conductor	Multi-end: Copper - Tinned	Braid, 99.4%	2.11 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 5015 - bl	2.65 mm +/- 0.1 mm

Electrical data	
Impedance	50 Ω +/-2Ω
Operating frequency	≤ 40 GHz
Capacitance	95 pF/m
Velocity of signal propagation	70.6 %
Signal delay	4.72 ns/m
Screening effectiveness	≥ 90 dB at frequency 0.1 GHz ... 18GHz
Insulation resistance	100000000 MΩ*m
Operating Voltage (at sea level)	≤ 1.5 kVrms
Test voltage (50 Hz/1 min)	≤ 3.5 kVrms

Mechanical data	
Weight	approx. 21 g/m
Static bending radius	≥ 6 mm
Dynamic bending radius	≥ 20 mm

Environmental data	
Operation temperature	-65 °C ... 165 °C
Installation temperature	-20 °C ... 60 °C
Flame propagation standard	IEC 60332-1 UL 1581 § 1080 (VW-1)

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Environmental data	
Fire characteristics	contains halogene

Material compliance			
Item number	Directive / Regulation	Rating	Exemptions / Details
22511965	RoHS 2011/65/EU and (EU) 2015/863	Compliant without exemption	
	REACH 1907/2006 Article 33 SVHC	Free of SVHC >0,1%	

Suitable connectors	
Cable group	Y11

Ordering information		
Item number	Item description	Available as assembly only
22511965	MULTIFLEX_86	No

Power Matrix			
Calculation: typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]			
a coefficient typical =	0.71702	b coefficient typical =	0.02892
fmax =	40	P at 1 GHz =	140
Frequency GHz	Nom. attenuation (dB/m)	Nom. attenuation (dB/ft)	CW power (W)
	sea level 25°C ambient temperature	sea level 25°C ambient temperature	sea level 40°C ambient temperature
0.20	0.326	0.100	313
0.40	0.465	0.142	221
0.60	0.573	0.175	181
0.80	0.664	0.203	157
1.00	0.746	0.227	140
1.20	0.820	0.250	128
1.40	0.889	0.271	118
1.60	0.953	0.291	111
1.80	1.014	0.309	104
2.00	1.072	0.327	99
4.00	1.550	0.472	70
6.00	1.930	0.588	57
8.00	2.259	0.689	49
10.00	2.557	0.779	44
20.00	3.785	1.154	31
30.00	4.795	1.461	26
40.00	5.692	1.735	22

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