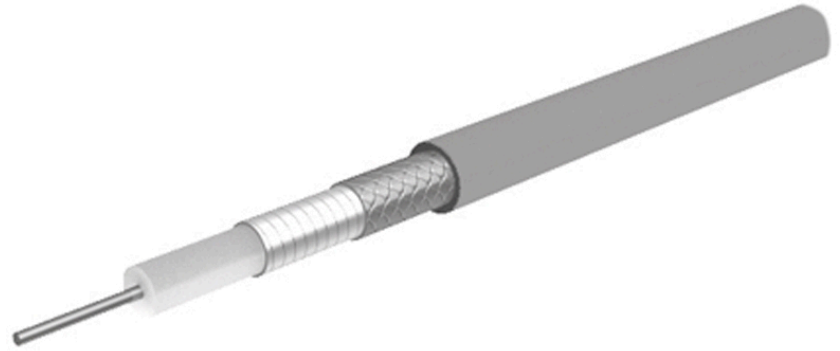


Flexible (RG402) 50 Ohm, 33 GHz, 165°C, Ø4.14 mm, FEP jacket

MULTIFLEX_141

Properties

- Flexible alternative to semi-rigid cables
- Wide temperature range
- Suitable for use in applications up to 33 GHz



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.92 mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.93 mm
Outer conductor	Copper, Silver plated	Wrapped foil, 100%	3.21 mm
Outer conductor	Multi-end: Copper - Tinned	Braid, 83%	3.53 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 5015 - bl	4.14 mm +/- 0.1 mm

Electrical data	
Impedance	50 Ω +/-2Ω
Operating frequency	≤ 33 GHz
Capacitance	95 pF/m
Velocity of signal propagation	70.6 %
Signal delay	4.7 ns/m
Screening effectiveness	≥ 90 dB at frequency 0.1 GHz ... 18GHz
Insulation resistance	100000000 MΩ*m
Operating Voltage (at sea level)	≤ 1.9 kVrms
Test voltage (50 Hz/1 min)	≤ 3.8 kVrms

Mechanical data	
Weight	approx. 45 g/m
Static bending radius	≥ 10 mm
Dynamic bending radius	≥ 40 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
22511964	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		Y17	
Ordering information			
Item number	Item description	Available as assembly only	
22511964	MULTIFLEX_141	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 =	0.3732	b coefficient typical =	0.0279
fmax =	33	P at 1 GHz =	281
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	0.172	0.053	628
0.40	0.247	0.075	444
0.60	0.306	0.093	363
0.80	0.356	0.109	314
1.00	0.401	0.122	281
1.20	0.442	0.135	257
1.40	0.481	0.146	237
1.60	0.517	0.157	222
1.80	0.551	0.168	209
2.00	0.584	0.178	199
4.00	0.858	0.262	140
6.00	1.082	0.330	115
8.00	1.279	0.390	99
10.00	1.459	0.445	89
20.00	2.227	0.679	63
30.00	2.881	0.878	51
33.00	3.065	0.934	49

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