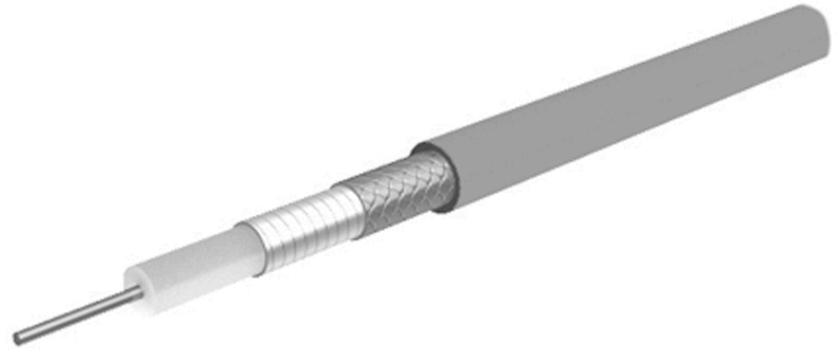


Flexible (RG402) 50 Ohm, 33 GHz, 165°C, Ø4.14 mm, FEP jacket

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	0.92mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.93mm
Outer conductor	Copper, Silver plated	Wrapped foil, 100%	3.21mm
Outer conductor	Multi-end: Copper - Tinned	Braid, 83%	3.53mm
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
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 kV
Test voltage (50 Hz/1 min)	≤ 3.8 kV

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

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 =	33.0	P at 1 GHz =	373.0
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	0.172	0.052	834
0.40	0.247	0.075	590
0.60	0.306	0.093	482
0.80	0.356	0.109	417
1.00	0.401	0.122	373
1.20	0.442	0.135	341
1.40	0.481	0.147	315
1.60	0.517	0.158	295
1.80	0.551	0.168	278
2.00	0.584	0.178	264
4.00	0.858	0.262	186
6.00	1.082	0.330	152
8.00	1.279	0.390	132
10.00	1.459	0.445	118
20.00	2.227	0.679	83
30.00	2.881	0.878	68
33.00	3.065	0.934	65

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