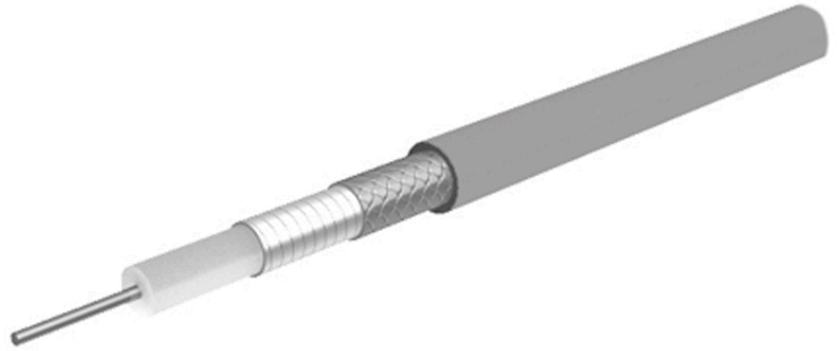


Flexible (RG402) 50 Ohm, 33 GHz, 165°C, Ø4.14 mm, FEP jacket

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)

Flexible (RG402) 50 Ohm, 33 GHz, 165°C, Ø4.14 mm, FEP jacket MULTIFLEX_141

Environmental data			
Fire characteristics		contains halogene	
Suitable connectors			
Cable group		Y17	
		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 =	373
Frequency	Nom. attenuation	Nom. attenuation	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	0.053	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	0.146	315
1.60	0.517	0.157	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

HUBER+SUHNER is certified by ISO 9001, ISO 14001, ISO 45001, IATF 16949, AS/EN 9100 and ISO/TS 22163-IRIS. Waiver: Facts and figures herein are for information only and do not represent any warranty of any kind.
DOCUMENT PIM-P997 / Date of publication: 03.05.2024 / uncontrolled copy