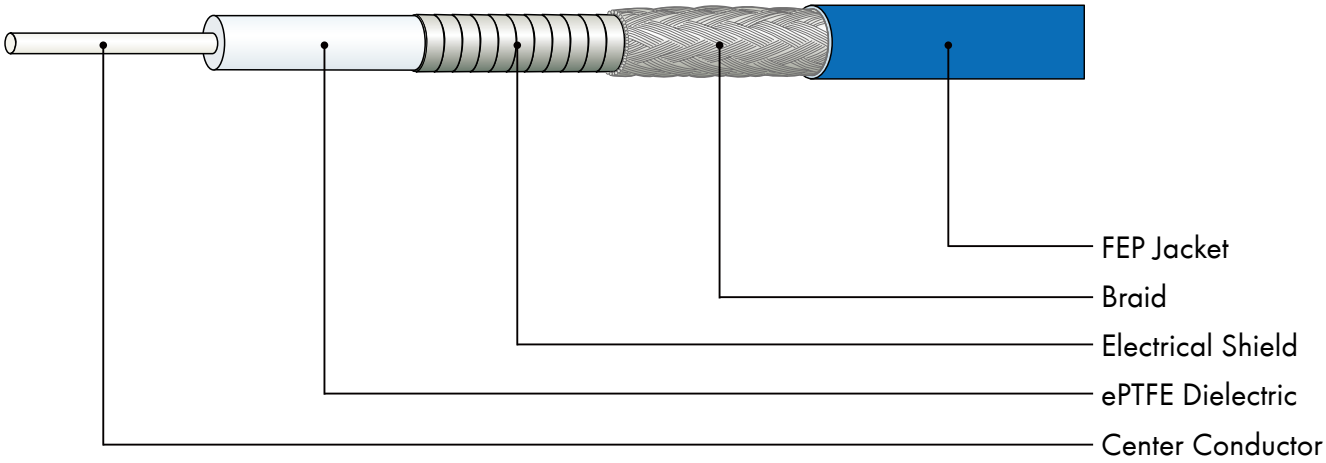
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

R-Test Multi Purpose Ultra Low Loss Coaxial Cable
DC-40 GHz Attenuation: 2.099 dB/m @ 40 GHz

MPUL422A

Cable Construction



Material And Diameter

Connector parts	Material	Diameter
Inner Conductor	Solid, Silver Plated Copper (SPC)	
Dielectric	EPTFE (Expanded Polytetrafluoroethylene)	
Foil	Copper, Silver plated	
Braid	Copper, Silver plated	
Jacket	FEP (Fluorinated ethylene propylene)	4.22 mm (.166 inch)

Electrical Data

Impedance	50 Ω
Frequency	DC to 40 GHz
Capacitance	80.05 pF/m
Velocity of signal propagation	84 %
Signal delay	3.9 ns/m
Insulation resistance	≥ 1 x 10^8 MΩ/m
Screening effectiveness	≥ 90 dB (up to 18 GHz) ≥ 80 dB (up to 40 GHz)
Operating Voltage Max. (Vrms @ 60 Hz)	≤ 1.4 kVrms (@ sea level)
Power Handling	See chart
Phase Stability vs Bending*	±5° typ/±9.5° max
Amplitude Stability vs Bending*	±0.1 dB typ/±0.2 dB max

** according to IEC60966-1, wrapped 360° around a mandrel of 57 mm (2.25 in) radius*

Mechanical Data

Weight	N/A
Min. bending radius	12.7 mm

Environmental Data

Temperature range	-65°C to +200°C
RoHS (2011/65/EU)	compliant

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Typical Attenuation

Frequency (GHz)	Typical Attenuation (dB/m) @ 20°C sea level	Typical Attenuation (dB/ft) @ 20°C sea level	Max. CW power (Watt) @ 20°C sea level
1	0.331	0.101	500
2	0.431	0.131	370
4	0.659	0.201	260
6	0.759	0.231	210
8	0.941	0.287	180
10	0.994	0.303	160
12	1.151	0.351	150
14	1.188	0.362	140
16	1.276	0.389	125
18	1.410	0.430	120
20	1.439	0.439	160
22	1.515	0.462	110
24	1.588	0.484	105
26	1.709	0.521	100
28	1.771	0.540	99
30	1.801	0.549	97
32	1.863	0.568	95
34	1.922	0.586	90
36	1.984	0.605	85
38	2.044	0.623	80
40	2.099	0.640	75

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