



CABLE ASSOCIATES

BLUESTAR 40GHz RF CABLE DATASHEET



MADE IN
USA

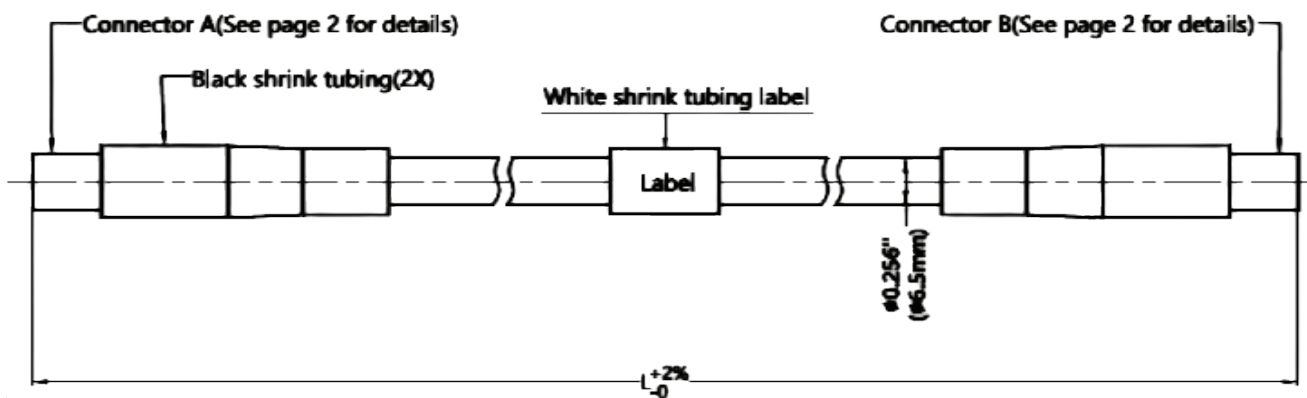
INDUSTRIES SERVED

Military/Aerospace • Communications • Telecom
Industrial • Utilities • Energy • Medical
Automotive • Agriculture

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cableassociates.com

BLUESTAR 40GHZ RF CABLE DATASHEET



KEY CHARACTERISTICS

- Extruded solid low loss coaxial cable
- Armored and unarmored jacketing available
- Rigid long neck connector for proven durability
- Precision NMD 2.92mm & 2.92mm connectors rated to 40GHz
- Cable rated -40°C to +85°C
- 1 Year warranty

APPLICATIONS

- General lab test RF cable
- Military and Industrial
- R&D Labs
- Wide temperature range
- DC-40GHz
- Custom lengths available
- 5G Communications
- Antenna Testing

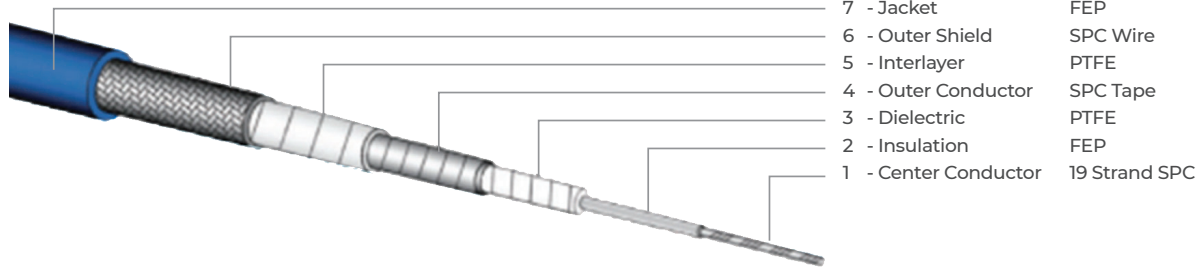


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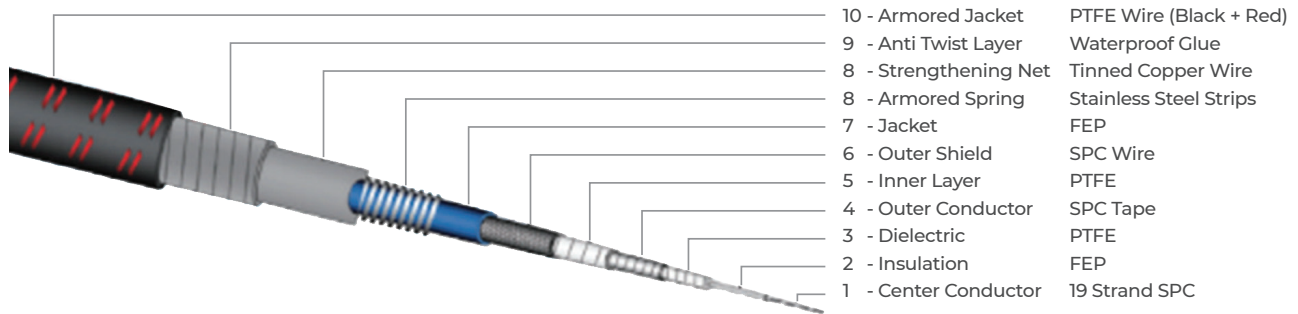


CABLE TYPES

Unarmored Cable Construction



Armored Cable Construction



Unarmored Mechanical Specs.

Outside Dia. of Cable (mm)	3.80
Min. Bending R.: Installation (mm)	18
Min. Bending R.: Repeated (mm)	36
Weight (g/m)	32

Armored Mechanical Specs

Outside Dia. of Armored Cable (mm)	6.50
Armored Min. Bending R.: Installation (mm)	32.5
Armored Min. Bending R.: Repeated (mm)	65
Armored Weight (g/m)	97

COAX PERFORMANCE

1.0 MATERIAL SPECIFICATIONS

PIECE PARTS	MATERIALS	PLATING
Coupling nut	Stainless steel	Passivation
Body	Stainless steel	Passivation
Contact Pin	Be-Cu	Gold
Insulator	PEEK & PTFE	Natural
Cable	Armored low loss stable phase RF cable (Black + Red)	

2.0 ELECTRICAL SPECIFICATIONS

Impedance	50Ω
Frequency range	DC ~ 40GHz
Voltage rating	335V(rms)
Dielectric withstanding voltage	500V(DC)
Insulation resistance	3000MΩ
Insertion Loss	See page 3 for details
VSWR	≤ 1.30
Mechanical phase stability	±8° Max.
Mechanical amplitude stability	±0.1dB Max.

3.0 MECHANICAL SPECIFICATIONS

Min. bending radius (static)	1.28" (32.5mm)
Min. bending radius (dynamic)	2.56" (65mm)
Recommended coupling torque	7-9 in-lbs (29M)
Coupling nut retention force	60 lbs (29M)
Durability	500 Cycles

4.0 ENVIRONMENTAL SPECIFICATIONS

RoHS & REACH	Compliant
Temperature range	-40°C~+105°C



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COAX PERFORMANCE

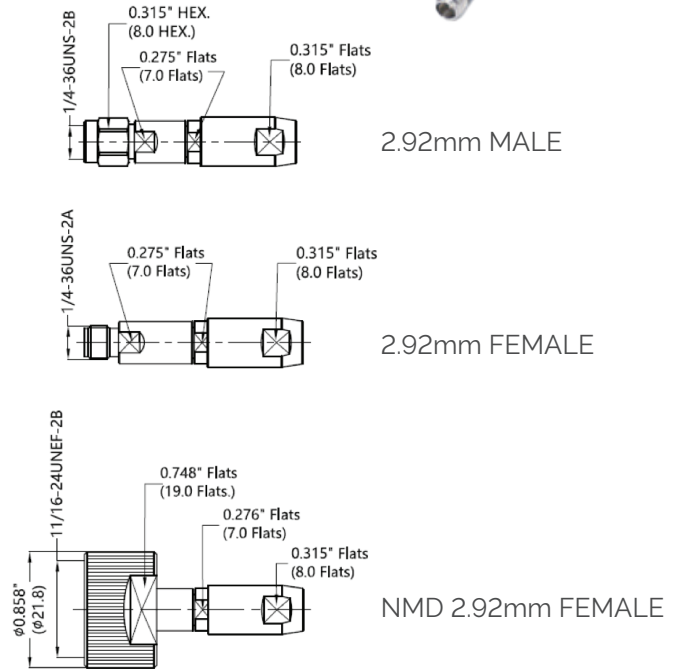
CONNECTORS:

- 2.92mm MALE
- 2.92mm FEMALE
- NMD 2.92mm FEMALE

MAX FREQUENCY: 40 GHz

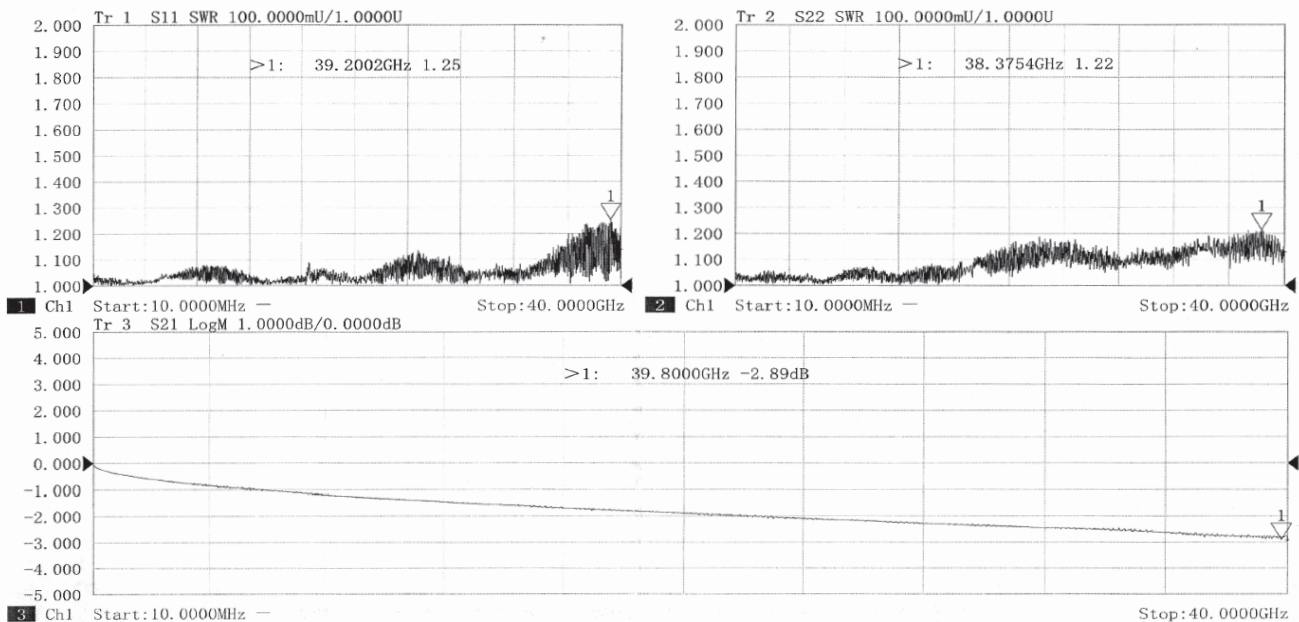
LENGTH (in)	MAX INSERTION LOSS (dB)
6	1.05
12	1.41
18	1.77
24	2.13
30	2.5
36	2.86
42	3.22
48	3.59
54	3.95
60	4.31
66	4.68
72	5.04
78	5.4
84	5.76
90	6.13
96	6.49
102	6.85
108	7.22
114	7.58
120	7.94

CONNECTOR OUTLINE DRAWINGS



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TYPICAL S11/S22/S21 PERFORMANCE 36" EXAMPLE





BLUESTAR 40GHz RF CABLE ORDERING GUIDE

CABLE ASSOCIATES PART NUMBER	DESCRIPTION	CONNECTORS	CABLE TYPE	LENGTH (FEET)
95227913-XXXFT	Bluestar 40GHz RF Test Cable	2.92mm M/M	Armored	
95227914-XXXFT	Bluestar 40GHz RF Test Cable	2.92mm M/M	Unarmored	
95227915-XXXFT	Bluestar 40GHz RF Test Cable	2.92mm M/F	Armored	
95227916-XXXFT	Bluestar 40GHz RF Test Cable	2.92mm M/F	Unarmored	
95227917-XXXFT	Bluestar 40GHz RF Test Cable	2.92mm F/F	Armored	
95227918-XXXFT	Bluestar 40GHz RF Test Cable	2.92mm F/F	Unarmored	
95227919-XXXFT	Bluestar 40GHz RF Test Cable	NMD 2.92mm (F) to 2.92mm (F)	Armored	
95227920-XXXFT	Bluestar 40GHz RF Test Cable	NMD 2.92mm (F) to 2.92mm (F)	Unarmored	
95227921-XXXFT	Bluestar 40GHz RF Test Cable	NMD 2.92mm (F) to 2.92mm (M)	Armored	
95227922-XXXFT	Bluestar 40GHz RF Test Cable	NMD 2.92mm (F) to 2.92mm (M)	Unarmored	

