5513802 | QR® 540 JCA SM MT

75 Ohm QR® Trunk and Distribution Cable, black PE jacket



 *Product complies with the Build America, Buy America Act (BABAA) requirements of the Infrastructure Investment and Jobs Act of 2021 (Pub. L. 117- 58, §§ 70901-70953), or is the subject of a waiver approved by the Secretary of Commerce or designee. Compliance requirements and waiver applicability vary based on government funding program. Check the laws and regulations for your specific program.

Product Classification

Regional Availability North America

Product Type Coaxial hardline cable

Product Brand QR®

Government FundingBuild America Buy America (BABA) compliant*

General Specifications

Cable Type540 SeriesConstruction TypeWeldedJacket ColorBlack

Short Description QR 540 JCA SM MT PR7276

Dimensions

Cable Length1,127.76 m | 3700 ftDiameter Over Center Conductor, nominal3.15 mm | 0.124 inDiameter Over Dielectric, nominal13.056 mm | 0.514 inDiameter Over Jacket, nominal15.494 mm | 0.61 inDiameter Over Outer Conductor, nominal13.716 mm | 0.54 inJacket Thickness, nominal0.889 mm | 0.035 inOuter Conductor Thickness, nominal0.343 mm | 0.014 in

Electrical Specifications

Capacitance 50.197 pF/m | 15.3 pF/ft

Capacitance Tolerance $\pm 1.0 \text{ pF/ft}$ Characteristic Impedance75 ohm



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Characteristic Impedance Tolerance ±2 ohm

dc Resistance Note

Nominal values based on a standard condition of 20 °C (68 °F)

dc Resistance, Inner Conductor, nominal3.346 ohms/km | 1.02 ohms/kftdc Resistance, Loop, nominal5.282 ohms/km | 1.61 ohms/kftdc Resistance, Outer Conductor, nominal1.936 ohms/km | 0.59 ohms/kft

Jacket Spark Test Voltage5000 VacNominal Velocity of Propagation (NVP)88 %

Operating Frequency Band 5-3000 MHz

Structural Return Loss 24 dB @ 1003-1218 MHz | 24 dB @ 1219-1794 MHz | 30 dB @ 5-1002

MHz

Structural Return Loss, Grade N ≥24 dB @ 1003−1218 MHz | ≥24 dB @ 1219−1794 MHz | ≥30 dB @ 5−1002

MHz

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
5.0	0.46	0.14
55.0	1.54	0.47
85.0	1.94	0.59
204.0	3.05	0.93
211.0	3.12	0.95
250.0	3.38	1.03
300.0	3.71	1.13
350.0	4.04	1.23
400.0	4.33	1.32
450.0	4.59	1.4
500.0	4.89	1.49
550.0	5.12	1.56
600.0	5.38	1.64
750.0	6.07	1.85
865.0	6.56	2
1002.0	7.12	2.17
1218.0	7.89	2.41
1500.0	9.07	2.76
1794.0	10.11	3.08
1800.0	10.13	3.09



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2000.0	10.81	3.29
2200.0	11.46	3.49
2500.0	12.41	3.78
2700.0	13.03	3.97
3000.0	13.93	4.24

Material Specifications

Jacket Material

Center Conductor Material Copper-clad aluminum

Dielectric Material Foam PE PΕ

Outer Conductor Material Aluminum

Mechanical Specifications

Minimum Bend Radius, bonded 101.6 mm | 4 in **Pulling Tension, maximum** 99.79 kg | 220 lb

Environmental Specifications

Environmental Space Aerial

Packaging and Weights

Packaging Type Reel

178.58 kg/km | 120 lb/kft Weight, gross

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



