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 Requirements Build America Buy America (BABA) compliant*

General Specifications

Cable Type540 SeriesConstruction TypeWeldedJacket ColorBlack

 Location of Manufacturing
 Catawba, North Carolina

 Short Description
 OR 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

ИHz

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

Center Conductor Material Copper-clad aluminum

Dielectric MaterialFoam PEJacket MaterialPE

Outer Conductor Material Aluminum

Mechanical Specifications

Minimum Bend Radius, bonded101.6 mm | 4 inPulling Tension, maximum99.79 kg | 220 lb

Environmental Specifications

Environmental Space Aerial

Packaging and Weights

Packaging Type Reel

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

Regulatory Compliance/Certifications

AgencyClassificationCHINA-ROHSBelow maximum concentration valueISO 9001:2015Designed, manufactured and/or distributed under this quality management systemREACH-SVHCCompliant as per SVHC revision on www.commscope.com/ProductComplianceROHSCompliantUK-ROHSCompliant



