5314203 | P3® 500 JCAT R SM MT

75 Ohm P3® Trunk and Distribution Cable, black PE jacket with coextruded red stripe

Product Classification	
Product Type	Coaxial hardline cable
Product Brand	P3®
Warranty	One year
General Specifications	
Cable Type	500 Series
Construction Type	Swaged
Jacket Color	Black with co-extruded red stripe
Short Description	P3 500 JCAT R SM MT PR7280
Dimensions	
Cable Length	731.52 m 2400 ft
Diameter Over Center Conductor, nominal	2.769 mm 0.109 in
Diameter Over Dielectric, nominal	11.481 mm 0.452 in
Diameter Over Jacket, nominal	14.224 mm 0.56 in
Diameter Over Outer Conductor, nominal	12.7 mm 0.5 in
Jacket Thickness, nominal	0.762 mm 0.03 in
Outer Conductor Thickness, nominal	0.61 mm 0.024 in
Electrical Specifications	
Capacitance	50.197 pF/m 15.3 pF/ft
Capacitance Tolerance	±1.0 pF/ft
Characteristic Impedance	75 ohm
Characteristic Impedance Tolerance	±2 ohm
dc Resistance Note	Nominal values based on a standard condition of 20 $^\circ\mathrm{C}$ (68 $^\circ\mathrm{F})$
dc Resistance, Inner Conductor, nominal	4.429 ohms/km 1.35 ohms/kft
dc Resistance, Loop, nominal	5.643 ohms/km 1.72 ohms/kft

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dc Resistance, Outer Conductor, nominal	1.214 ohms/km 0.37 ohms/kft
Jacket Spark Test Voltage	5000 Vac
Nominal Velocity of Propagation (NVP)	87 %
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	0.52	0.16
55.0	1.77	0.54
85.0	2.23	0.68
204.0	3.51	1.07
211.0	3.58	1.09
250.0	3.94	1.2
300.0	4.3	1.31
350.0	4.69	1.43
400.0	5.02	1.53
450.0	5.35	1.63
500.0	5.67	1.73
550.0	5.97	1.82
600.0	6.3	1.92
750.0	7.09	2.16
865.0	7.68	2.34
1002.0	8.32	2.54
1218.0	9.28	2.83
1500.0	10.68	3.26
1794.0	11.88	3.62
1800.0	11.91	3.63
2000.0	12.68	3.87
2200.0	13.44	4.1
2500.0	14.52	4.43
2700.0	15.22	4.64

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3000.0	16.25		4.95
Material Specific	ations		
Center Conductor Materia	al	Copper-clad aluminum	
Dielectric Material		Foam PE	
Jacket Material		PE	
Outer Conductor Material		Aluminum	
Mechanical Spec	cifications		
Minimum Bend Radius, b	onded	88.9 mm 3.5 in	
Pulling Tension, maximu	n	136.078 kg 300 lb	
Environmental S	pecifications		
Environmental Space		Aerial	
Packaging and V	Veights		
Packaging Type		Reel	
Weight, gross		178.58 kg/km 120 lb/kft	
Regulatory Compliance/Certifications			
	Classification		

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

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