F4CR-DMDM-P

Base Product



HELIAX® 1/2" Superflexible Fire retardant SureFlex® Jumper with interface types 7-16 DIN Male and 7-16 DIN Male,, with black nonhalogenated fire retardant polyolefin jacket B2ca-S1a-d1-a1

Product Classification

Product Type	Wireless transmission cable assembly
Product Series	RSJ4-50
General Specifications	
Body Style, Connector A	Straight
Body Style, Connector B	Straight
Interface, Connector A	7-16 DIN Male
Interface, Connector B	7-16 DIN Male
Dimensions	
Nominal Size	1/2 in
Electrical Specifications	
3rd Order IMD Static	-116 dBm
3rd Order IMD Static Test Method	Two +43 dBm carriers
DTF, Connector A	-34 dB
DTF, Connector B	-34 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
698–960 MHz	1.065	30.04
1700-2200 MHz	1.065	30.04
2200–2700 MHz	1.106	25.96
3400–3800 MHz	1.222	20.01

Jumper Assembly Sample Label

Page 1 of 5

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F4CR-DMDM-P



Environmental Specifications

EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	s1a
EN50575 CPR Cable EuroClass Droplets Rating	d1
EN50575 CPR Cable EuroClass Acidity Rating	al
Immersion Test Method	Meets IEC 60529:2001, IP68 in mated condition

Included Products

FSJ4RK-50B

FSJ4RK-50B, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/2 in, black nonhalogenated, fire retardant polyolefin jacket B2ca-s1a-d1-a1 (CPR testing is conducted annually please reference the website for latest classification)

Page 2 of 5

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FSJ4RK-50B



FSJ4RK-50B, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/2 in, black non-halogenated, fire retardant polyolefin jacket B2ca-sla-d1-a1 (CPR testing is conducted annually please reference the website for latest classification)

Product Classification

dc Test Voltage

Product Type	Coaxial wireless cable
Product Brand	HELIAX® SureFlex®
Product Series	FSJ4-50B
Ordering Note	CommScope® standard product in Asia Pacific
General Specifications	
Product Number	520094502/00 SZ520094502/00
Flexibility	Superflexible
Jacket Color	Black
Performance Note	Attenuation values typical, guaranteed within 5%
Dimensions	
Diameter Over Dielectric	8.89 mm 0.35 in
Diameter Over Jacket	13.462 mm 0.53 in
Inner Conductor OD	3.556 mm 0.14 in
Outer Conductor OD	12.192 mm 0.48 in
Nominal Size	1/2 in
Electrical Specifications	
Cable Impedance	50 ohm ±1 ohm
Capacitance	82.7 pF/m 25.207 pF/ft
dc Resistance, Inner Conductor	2.69 ohms/km 0.82 ohms/kft
dc Resistance, Outer Conductor	5.12 ohms/km 1.561 ohms/kft

Page 3 of 5

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2500 V



FSJ4RK-50B

Inductance	0.207 µH/m 0.063
Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 10200 MHz
Peak Power	22.5 kW
Velocity	81 %

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
680-800 MHz	1.201	20.8
800–960 MHz	1.201	20.8
1700–2200 MHz	1.201	20.8
2300–2700 MHz	1.201	20.8

Material Specifications

Dielectric Material	Foam PE
Jacket Material	Non-halogenated, fire retardant polyolefin
Inner Conductor Material	Copper-clad aluminum wire
Outer Conductor Material	Corrugated copper

0.063 µH/ft

Mechanical Specifications

Minimum Bend Radius, multiple Bends	31.75 mm 1.25 in
Minimum Bend Radius, single Bend	31.75 mm 1.25 in
Number of Bends, minimum	30
Number of Bends, typical	50
Tensile Strength	79 kg 174.165 lb
Bending Moment	2.7 N-m 23.897 in lb
Flat Plate Crush Strength	2 kg/mm 111.995 lb/in

Environmental Specifications

Installation temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Attenuation, Ambient Temperature	68°F 20°C

Page 4 of 5

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FSJ4RK-50B

Average Power, Ambient Temperature	104 °F 40 °C
Average Power, Inner Conductor Temperature	212 °F 100 °C
EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	s1a
EN50575 CPR Cable EuroClass Droplets Rating	d1
EN50575 CPR Cable EuroClass Acidity Rating	al
Fire Retardancy Test Method	IEC 60332-1-2 NFPA 130-2010 UL 1666/CATVR/CMR
Smoke Index Test Method	IEC 61034
Toxicity Index Test Method	IEC 60754-1 IEC 60754-2

Packaging and Weights

Cable weight

CENELEC -

0.24 kg/m | 0.161 lb/ft

Regulatory Compliance/Certifications

ISO () (

Agency	Classification
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
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
UL/ETL Certification	CATVR/CMR

Page 5 of 5

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