Detailed Specification & Technical Data

4246FI0

4 Pair 23AWG F/UTP Category 6 Indoor/Outdoor CM-LS

10/100/1000 BaseT Ethernet, IP CCTV, Digital Integration, HDBaseT

Construction & Dimensions

CONSTRUCTION & DIMENSIONS	-
CONDUCTOR PARAMETER	-
• Number of Pairs	4
• AWG Size	23
• Conductor Stranding	Solid
• Conductor Type	Bare Copper
• Nominal DCR	21 Ohm/1000ft
INSULATION PARAMETERS	-
• Insulation Type	Polyolefin
• Insulation Color Code	1.Blue,WH-Blue 2.Orange,WH-Orange 3.Green,WH-Green 4.Brown, WH-Brown
SHIELDING PARAMETERS	-
• Shielding	100% Aluminum Foil
• Drain Wire AWG	24 AWG
• Flooding Compound	Yes - Water Blocking
ELECTRICAL CHARACTERISTICS	-
• Nominal Impedance	100 Ohm
• Nominal Cap. Between Conductors	14 pF/ft
INNER JACKET PARAMETERS	-

Overall Construction

OVERALL CONSTRUCTION PARAMETERS	-
Total Number of Conductors	8
Jacket Type	PVC - UV Resistant
Nominal Cable O.D.	0.29 in
Plenum	No
NEC UL Rating	CM-LS
RoHS Compliant	Yes
ANSI/TIA Category	Category 6 TIA/EIA 568C.2
TIA Test	ANSI/TIA-568-C.2
Pull Tension	35 lbs
Bend Radius	1.45 in
Cable Weight	44 lbs

Overall Electrical & Optical Characteristics

OVERALL ELECTRICAL/OPTICAL CHARACTERISTICS	-
Nominal Velocity of Propagation (VP)	68 %
Delay Skew	30 ns/100m
UL Flammability	UL1685
CSA Flammability	-
Operating Range	-20 to 60 Deg C
UL Voltage Rating	300

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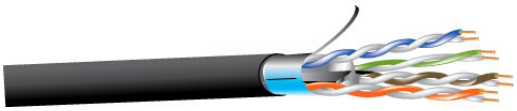
AV, SECURITY & NETWORKING SOLUTIONS



4246FIO

Electrical Performance

Frequency (Mhz)	Max. Insertion Loss	Min. NEXT	Min. PSNEXT	Min. PSACR	Min. ACR	Min. PSACRF (PSELF-EXT)	Min. ACRF (ELF-EXT)	Min. PSANEXT	Min. PSAACRF	Min. RL (Return Loss)	Min. TCL	Min. ELTCTL	Max/Min Input Imp. Unfit	Max/Min Fitted Imp.
1 MHz	2 db/100m	75.3 dB	73.3 dB	71.3 dB	73.3 dB	67.8 dB	70.8 dB	67 dB	67 dB	20 dB	40 dB	35 dB	100 ± 15 Ohm	100 ± 15 Ohm
4 MHz	3.7 db/100m	66.3 dB	64.3 dB	60.6 dB	62.6 dB	55.8 dB	58.8 dB	67 dB	66.2 dB	23 dB	40 dB	23 dB	100 ± 15 Ohm	100 ± 15 Ohm
8 MHz	5.2 db/100m	63.3 dB	61.3 dB	56.1 dB	58.1 dB	49.7 dB	52.7 dB	67 dB	60.2 dB	24.5 dB	40 dB	17 dB	100 ± 15 Ohm	100 ± 15 Ohm
10 MHz	5.8 db/100m	61.8 dB	59.8 dB	54 dB	56 dB	47.8 dB	50.8 dB	67 dB	58.2 dB	25 dB	40 dB	15 dB	100 ± 15 Ohm	100 ± 15 Ohm
16 MHz	7.4 db/100m	58.6 dB	56.6 dB	49.2 dB	51.2 dB	43.7 dB	46.7 dB	67 dB	54.1 dB	25 dB	38 dB	10.9 dB	100 ± 15 Ohm	100 ± 15 Ohm
20 MHz	8.3 db/100m	57.1 dB	55.1 dB	46.8 dB	46.8 dB	41.8 dB	44.8 dB	67 dB	52.2 dB	25 dB	37 dB	9 dB	100 ± 15 Ohm	100 ± 15 Ohm
25 MHz	9.3 db/100m	55.5 dB	53.5 dB	44.3 dB	46.3 dB	39.8 dB	42.8 dB	67 dB	50.2 dB	24.3 dB	36 dB	7.1 dB	100 ± 15 Ohm	100 ± 15 Ohm
31.25 MHz	11.4 db/100m	54 dB	52 dB	41.6 dB	43.6 dB	37.9 dB	40.9 dB	67 dB	48.3 dB	23.6 dB	35.1 dB	5.1 dB	100 ± 15 Ohm	100 ± 15 Ohm
62.5 MHz	15 db/100m	49.1 dB	47.1 dB	32.1 dB	34.1 dB	31.9 dB	34.9 dB	65.6 dB	42.3 dB	21.5 dB	32 dB		100 ± 15 Ohm	100 ± 15 Ohm
100 MHz	19.3 db/100m	45.8 dB	43.8 dB	24.5 dB	26.5 dB	27.8 dB	30.8 dB	62.5 dB	38.2 dB	20.8 dB	30 dB		100 ± 15 Ohm	100 ± 15 Ohm
155 MHz	24.5 db/100m	42.7 dB	40.7 dB	16.2 dB	18.2 dB	24 dB	27 dB	59.6 dB	34.4 dB	19.8 dB	28 dB		100 ± 15 Ohm	100 ± 15 Ohm
200 MHz	28.3 db/100m	40.9 dB	38.9 dB	10.6 dB	12.6 dB	21.8 dB	24.8 dB	58 dB	32.2 dB	18.7 dB	27 dB		100 ± 22 Ohm	100 ± 15 Ohm
250 MHz	32.1 db/100m	39.3 dB	37.3 dB	5.2 dB	7.2 dB	19.8 dB	22.8 dB	56.5 dB	30.2 dB	18 dB	26 dB		100 ± 32 Ohm	100 ± 15 Ohm
300 MHz	38 db/100m	38.1 dB	36.1 dB	-0.5 dB	2.5 dB	18.3 dB	21.3 dB	55.3 dB	28.7 dB	17.5 dB			100 ± 32 Ohm	100 ± 15 Ohm
350 MHz	38.9 db/100m	37.1 dB	35.1 dB	-3.7 dB	-1.7 dB	16.9 dB	19.9 dB	54.3 dB	27.3 dB	17 dB			100 ± 32 Ohm	100 ± 15 Ohm
400 MHz	42 db/100m	36.3 dB	34.3 dB	-7.7 dB	-5.7 dB	15.8 dB	18.8 dB	53.5 dB	26.2 dB	16.6 dB			100 ± 32 Ohm	100 ± 15 Ohm
450 MHz	45 db/100m	35.5 dB	33.5 dB	-11.5 dB	-9.5 dB	14.7 dB	17.7 dB	52.8 dB	25.8 dB	16.2 dB			100 ± 32 Ohm	100 ± 15 Ohm
500 MHz	47.9 db/100m	34.8 dB	32.8 dB	-15 dB	-13 dB	13.8 dB	16.8 dB	52 dB	24.2 dB	15.9 dB			100 ± 32 Ohm	100 ± 15 Ohm
550 MHz	50.6 db/100m	34.2 dB	32.2 dB	-18.4 dB	-16.4 dB	13 dB	16 dB	51.3 dB	23.8 dB	15.6 dB			100 ± 32 Ohm	100 ± 15 Ohm
Tested to 550Mhz - Values above 250Mhz are for Engineering Purposes Only														

Related Products

RELATED PRODUCTS	-
Plenum Number	254246F
Jack	KJS458TL-C6A
Modular Plug	90170-BI

Part Numbers

Part Number	Jacket Color	Put Up Length
4246FIOBK1000	BLACK	1000