

Technical Data Sheet- CAT6A F/UTP CMP ETL LISTED
Category 6 Augmented Shielded Plenum

PART NUMBER:	FCAT238A-SHLD-XX (XX - digits denote jacket color)
DESCRIPTION:	23 AWG/4 PAIR Solid bare copper conductors, shielded with an overall plenum jacket
NEC RATING:	CMP-LP (0.6A) (NFPA 262)
APPROVALS	c(ETL)us Listed, UL 444, Verified to ANSI/TIA 568.2-D, ROHS complaint directive 2011/65/eu
APPLICATION	HDBase-T A & B 10 Gigabit Ethernet (IEEE 802.3an) 5 Gigabit Ethernet (IEEE 802.3bz) 2.5 Gigabit Ethernet (IEEE 802.3bz) Gigabit Ethernet (IEEE 802.3ab) 100 Mbps Ethernet (IEEE 802.3u) 1000 Mbps ATM 622 Mbps ATM 15W PoE (IEEE 802.3af) 30W PoE+ (IEEE 802.3at) 60W PoE++ (IEEE 802.3bt Type3) 100W PoE++ (IEEE 802.3bt Type 4)
JACKET PRINT	<i>4010346 CAT6A F/UTP c(ETL)us CMP-LP (0.6A) FT6 23 AWG 4PR UTP 90C VERIFIED TO TIA568.2-D ISO 11801 500 MHz MADE IN USA PO#/OP#/LOT#/ ROHS COMPLIANT XXXXFT-XXXXFT JULIAN DATE DATE/YR</i>

Conductor	FCAT238A-SHLD-XX (XX - digits denote jacket color)
Stranding	Solid
Number of Conductors	8 (4 Pair)
Conductor Average Diameter	0.046"
Rip cord	Yes
Shield	Mylar Wrap/Aluminum Wrap
Drain	24 AWG Tin Copper Solid
Spline	Flouropolymer
Jacket Material	FR-PVC
Overall Cable Diameter	0.290" Nom. (7.366mm)
Jacket Average Wall	0.015"± .002 (0.381mm)
Approximate Cable Weight	41 Lbs./1MFT Nom.
Flame Rating	NFPA 262, FT6

Electrical & Environmental Properties

Operating Temperature Rating	-20°C to +90°C (-4°F to 194°F)
Storage Temperature	-20°C to 75°C (-4°F to 167°F)
Operating Voltage Rating	300V RMS
DC Resistance	7.53Ω/100m
Mutual Capacitance	4.21 NF/100m Max
Resistance Unbalance	3.53%
Capacitance Unbalance	293.17pF/100m Max
Input Impedance	100Ω±15% (100Mhz), ±20Ω (100-250 MHz) ±25Ω (251-500 MHz)
Delay Skew	1.852ns @ 1.312
NVP %	68.0%
Electrical Performance Standards	UL 444

Ampacity

AWG	Number of 4-pair Cables in Bundle																				
	1			2-7			8-19			20-37			38-61			62-91			92-192		
	60°C	75°C	90°C	60°C	75°C	90°C	60°C	75°C	90°C	60°C	75°C	90°C	60°C	75°C	90°C	60°C	75°C	90°C	60°C	75°C	90°C
23	2.5	2.5	2.5	1.2	1.5	1.7	0.8	1.1	1.2	0.6	0.8	0.9	0.5	0.7	0.8	0.5	0.7	0.8	0.4	0.5	0.6

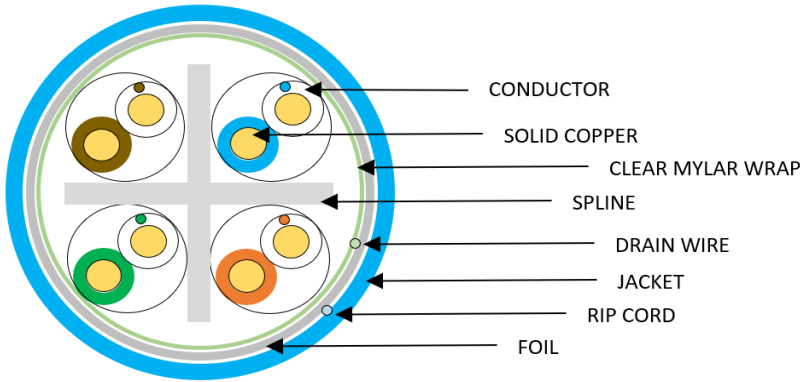
Electrical Specifications

FREQ (MHz)	INSERTION LOSS		NEXT		PS NEXT		ACR	
	TIA-568.2-D	TRANS CABLE	TIA-568.2-D	TRANS CABLE	TIA-568.2-D	TRANS CABLE	TIA-568.2-D	TRANS CABLE
1	1.7	1.8	90.8	88.5	87.9	86.5	89.2	86.8
4	3.4	3.5	78.9	75.4	77.1	73.4	75.6	72.1
8	4.9	4.9	72.1	71.7	69.6	70.3	67.4	67.0
10	5.5	5.5	71.5	68.9	70.3	67.4	66.1	63.6
16	7.0	6.9	69.1	69.3	66.5	68.1	62.2	62.4
20	7.8	7.7	66.8	64.2	65.3	62.9	59.4	56.7
25	8.8	8.7	65.7	67.5	63.7	65.2	57.3	59.1
31.25	9.8	9.7	61.1	65.1	59.5	64.2	51.8	55.5
62.5	14.0	13.8	62.4	60.4	58.8	57.7	50.0	47.1
100	17.9	17.7	56.8	63.2	53.6	58.3	39.8	45.8
155	22.6	22.3	56.1	50.5	53.8	49.4	35.3	29.1
200	25.9	25.5	51.3	52.3	49.6	50.0	26.6	27.7
250	29.2	28.8	48.2	45.4	45.1	44.2	19.8	17.7
300	32.2	31.8	48.3	49.3	46.7	48.5	17.7	18.8
350	35.1	34.6	45.1	51.1	43.0	48.3	11.8	18.0
400	37.7	37.2	45.4	49.6	42.8	46.3	8.4	13.9
450	40.3	39.7	48.2	46.5	46.2	44.0	8.5	8.5
500	42.8	42.1	39.3	47.0	37.1	43.0	-1.3	6.7

FREQ (MHz)	PSACR		ACRF		PSACRF		RETURN LOSS	
	TIA-568.2-D	TRANS CABLE	TIA-568.2-D	TRANS CABLE	TIA-568.2-D	TRANS CABLE	TIA-568.2-D	TRANS CABLE
1	86.2	84.7	85.8	84.5	85.6	82.9	23.6	35.8
4	73.7	69.9	73.2	73.1	72.9	71.9	29.6	33.0
8	64.9	65.4	66.2	68.7	65.4	67.0	35.5	38.0
10	64.9	62.1	64.1	64.4	63.1	63.2	32.9	36.7
16	60.0	61.4	61.7	64.8	60.5	63.6	35.9	38.2
20	57.6	55.1	62.2	65.4	60.9	63.6	37.1	37.2
25	55.3	56.5	61.1	66.3	59.8	62.3	35.1	37.4
31.25	50.1	54.6	62.7	60.8	60.0	58.0	33.6	34.3
62.5	45.5	44.7	53.8	56.9	53.1	53.5	30.4	34.1
100	36.5	41.6	51.8	52.0	49.3	49.9	26.2	33.7
155	32.3	28.0	49.1	48.5	46.0	44.4	24.6	28.1
200	24.9	25.5	46.6	48.7	45.0	45.1	24.9	26.4
250	16.5	16.5	41.1	40.3	40.7	39.3	28.9	24.0
300	16.4	17.1	41.2	41.3	40.0	40.1	27.4	20.9
350	9.4	15.2	42.3	41.5	40.0	40.1	23.4	20.4
400	6.8	11.4	39.8	35.6	38.9	35.2	25.4	19.9
450	7.4	6.0	42.2	41.7	39.5	38.8	26.3	18.4
500	-3.5	2.7	36.7	42.4	33.0	40.2	20.6	18.9

Mechanical Properties:

Max. Recommended Pull Tension:	25 Lbs.
Min. Bend Radius (Installed)	1.90 in. (48mm)
RoHS Compliant	Yes
Footage marker	Dual Sequential footage marker on jacket
Standard Length	1000 FT
Packaging	Plastic Reel



Additional information:

- Insulation Colors**
1. Blue/White-Blue, 2. Orange/White-Orange
 3. Green/White-Green, 4. Brown/White-Brown

Jacket Colors

Trans Cable Part #	Jacket Color	RAL Number
FCAT238A-SHLD-01	BLACK	9005
FCAT238A-SHLD-02	BLUE	5010
FCAT238A-SHLD-03	GREEN	6029
FCAT238A-SHLD-04	GRAY	7043
FCAT238A-SHLD-05	ORANGE	2011
FCAT238A-SHLD-06	PINK	3015
FCAT238A-SHLD-07	PURPLE	4007
FCAT238A-SHLD-08	RED	3002
FCAT238A-SHLD-09	WHITE	9001
FCAT238A-SHLD-10	YELLOW	1023



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