

Technical Data Sheet - CAT6A - UTP CMP ETL LISTED
Category 6 Augmented

PART NUMBER:	FCAT238A-XXX (XXX - digits denote jacket color)
DESCRIPTION:	23 AWG/4 PAIR Solid bare copper conductors, unshielded with an overall plenum jacket
NEC RATING:	CMP (NFPA 262)
APPROVALS	c(ETL)us Listed, UL 444, Tested 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 AUGMENTED 10GIG c(ETL)us CMP-LP (0.5A) FT6 23 AWG 4PR UTP 75C TESTED TO TIA-568C.2 ISO 11801 750 MHz MADE IN USA PO#/OP#/LOT#XXXX ROHS COMPLIANT XXXXFT-XXXXFT JULIAN DATE DATE/YR</i>

Conductor	FCAT238A-XXX (XXX Denote jacket color)
Conductor Insulation	Fluoropolymer
Stranding	Solid
Number of Conductors	8 (4 Pair)
Conductor Average Diameter	0.046"
Rip cord	Polyester
Shield	None
Drain	None
Spline	Fluoropolymer
Jacket Material	FR-PVC
Overall Cable Diameter	0.260" Nom. (6.604mm)
Jacket Wall	0.015"± .002 (0.381mm)
Approximate Cable Weight	41 Lbs./1MFT Nom.
Flame Rating	NFPA 262



Electrical & Environmental Properties

Operating Temperature Rating	-20°C to +75°C (-4°F to 167°F)
Storage Temperature	-20°C to 75°C (-4°F to 167°F)
Installation Temperature	0°C to 50°C (32°F to 122°F)
Operating Voltage Rating	300V RMS
DC Resistance	7.09Ω/100m
Mutual Capacitance	4.68 NF/100m Max
Resistance Unbalance	1.00%
Capacitance Unbalance	42.34pF/100m Max
Input Impedance	100Ω±15% (100Mhz), ±20Ω (100-250 MHz) ±25Ω (251-500 MHz)
Delay Skew	20.526s @ 1.312
NVP %	68.2%
Electrical Performance Standards	ANSI/TIA 568.2-D

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	90C°	60°C	75°C	90C°	60°C	75°C	90C°	60°C	75°C	90C°	60°C	75°C	90C°	60°C	75°C	90C°	60°C	75°C	90C°
24	2.0	2.0	2.0	1	1.4	1.6	0.8	1	1.1	0.6	0.7	0.9	0.1	0.1	0.7	0.4	0.5	0.6	0.3	0.4	0.5
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
22	3.0	3.0	3.0	1.4	1.8	2.1	1	1.2	1.4	0.7	0.9	1.1	0.6	0.8	0.9	0.6	0.7	0.8	0.5	0.6	0.7

Electrical Specifications

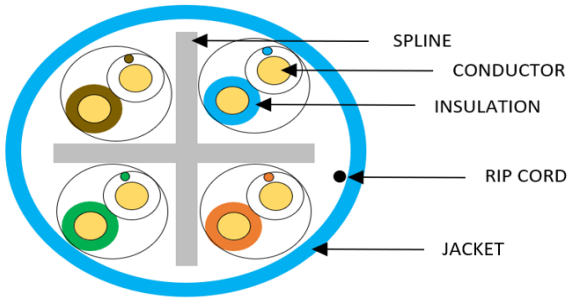
FREQ (MHz)	INSERTION LOSS		NEXT		PS NEXT		ACR	
	TIA-568.2-D	TRANS CABLE	TIA-568.2-D	TRANS CABLE	TIA-568.2-D	TRANS CABLE	TIA-568.2-D	TRANS CABLE
1	2.31	1.6	72.5	100.8	70.5	98.3	70.21	104.6
4	3.7	3.2	65.7	109.3	63.7	95.8	62.0	94.5
8	5.2	4.6	60.9	88.2	58.9	86.3	55.7	96.1
10	6.0	5.2	59.1	91.7	57.1	85.1	53.1	86.0
16	7.5	6.6	56.3	92.7	54.3	85.6	48.8	85.6
20	8.4	7.4	54.8	86.8	52.8	80.3	46.4	77.4
25	9.4	8.3	53.4	81.5	51.4	75.7	44.0	77.7
31.25	10.4	9.3	52.0	77.1	50.0	75.3	41.6	77.1
62.5	15.0	13.5	47.4	71.7	45.4	70.6	32.4	67.7
100	19.1	17.3	44.3	80.9	42.3	69.4	25.2	66.7
155	27.6	22.0	39.8	70.0	37.8	63.6	12.2	58.5
200	31.1	25.2	38.3	70.6	36.3	62.5	26.6	48.5
250	34.3	28.5	37.1	70.9	35.1	64.3	24.3	45.3
300	40.0	31.3	35.3	70.2	33.3	62.0	10.7	38.7
350	45.2	34.0	33.8	68.8	31.8	60.4	11.0	40.5
400	43.7	36.8	49.3	63.8	46.3	58.6	10.4	43.4
450	46.6	39.7	49.4	61.3	46.2	58.2	6.5	28.7
500	49.9	42.1	40.6	59.0	38.9	56.4	-3.7	33.1
550		44.1		67.0		59.1		25.1
600		45.9		57.1		56.7		31.3
650		47.7		59.1		54.2		21.8
700		49.3		58.2		55.7		12.5
750		52.7		69.4		52.1		11.0

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	68.21	95.0	70.21	102.1	68.2	93.3	23.1	40.0
4	60.0	86.1	62.0	90.2	63.7	87.0	31.4	42.4
8	53.7	80.0	55.7	86.7	58.9	80.2	31.8	40.2
10	51.1	81.9	53.1	84.9	57.1	73.6	35.1	39.8
16	46.8	75.0	48.8	76.7	54.3	68.0	32.1	38.4
20	44.4	69.9	46.4	70.4	52.8	63.2	35.1	38.9
25	42.0	67.7	44.0	81.2	51.4	58.8	34.6	40.7
31.25	39.6	64.0	41.6	77.3	50.0	56.5	31.7	38.0
62.5	30.4	57.2	32.4	59.1	45.4	57.8	33.8	43.2
100	23.2	53.4	41.9	54.5	42.3	48.0	34.8	37.8
155	10.2	37.5	36.7	38.3	37.8	36.4	29.8	35.5
200	5.3	35.6	32.1	41.3	36.3	33.4	31.7	36.7
250	33.0	34.1	33.0	38.8	35.1	29.4	29.8	29.1
300	10.6	27.1	25.8	34.5	33.3	20.5	38.7	28.1
350	7.5	20.6	30.5	31.4	31.8	18.5	32.3	27.6
400	7.7	20.7	30.4	29.1	27.5	10.8	33.5	29.9
450	5.0	13.7	22.2	16.5	20.5	13.1	34.8	26.7
500	-5.0	10.9	21.8	13.9	20.4	13.4	32.2	26.6
550		7.3		13.3		8.4		24.8
600		2.2		12.6		3.2		25.8
650		-3.2		9		-3		26.7
700		-1.5		6.4		-1.4		27.8
750		-7.8		7.1		-5		32.8

Parameter above 500MHz are for internal use only.

Mechanical Properties:

Max. Recommended Pull Tension:	25 Lbs.
Min. Bend Radius (Installed)	1.1" Min
RoHS Compliant	Yes
Footage marker	Dual Sequential footage marker on jacket
Standard Length	1000 FT
Packaging	Reellex Air® Box, Reel In A Box, Plastic Reel



Additional information:

- Insulation Colors** 1. Blue/White-Blue, 2. Orange/White-Orange
 3. Green/White-Green, 4. Brown/White-Brown
- Jacket Colors** Black, Blue, Green, Gray, Orange, Pink, Purple, Red, White, Yellow

Trans Cable Part #	Jacket Color	RAL Number
FCAT238A-001	BLACK	9005
FCAT238A-002	BLUE	5010
FCAT238A-003	GREEN	6029
FCAT238A-004	GRAY	7043
FCAT238A-005	ORANGE	2011
FCAT238A-006	PINK	3015
FCAT238A-007	PURPLE	4007
FCAT238A-008	RED	3002
FCAT238A-009	WHITE	9001
FCAT238A-010	YELLOW	1023



This document is property of Trans Cable. The information and contained herein is considered Proprietary and not to be reproduced by any means without written consent of Trans Cable. The information presented herein, to the best of our knowledge, is true and accurate. However, since conditions of use are beyond our control, all recommendations or suggestions are presented without guarantee or responsibility on our part. We disclaim all liability in connection with the use information contained herein or otherwise.

Headquarters-800 East 2nd Street-Bonham-Texas-75418-Phone (903)449-4622