

Technical Data Sheet - CAT6 - CMP UTP UL LISTED
Category 6 Unshielded Plenum

PART NUMBER:	FCAT238-XXX-DSS (XXX - digits denote jacket color)
DESCRIPTION:	23 AWG/4 PAIR Solid bare copper conductors, unshielded with an overall plenum jacket
NEC RATING:	CMP
APPROVALS	UL listed or C(UL)us Listed
APPLICATION	ANSI X3T9.5 TP-PMD (FDDI), ATM PMD 155Mbps IEEE 802.3 Fast Ethernet :10 Base-T, 100 Base-T4, 100 Base-X IEEE 802.5 :4/16 Mbps Token Ring, IEEE 802.12 :100 Base-VG
JACKET PRINT	TRANS CABLE E472493 c(UL)us CMP UTP FT6 75°C 23 AWG 4PR VERIFIED (UL) CAT6 ANSI/TIA 568-C.2 ISO-IEC 11801 --- TESTED TO 550 MHz ROHS COMPLIANT MADE IN USA PO#/OP#/ LOT #/CL# ROHS COMPLIANT 0000 FT [JULIAN DATE/YR]

Conductor	FCAT238-XXX-DSS (XXX Denote jacket color)
Stranding	Solid
Number of Conductors	8 (4 Pair)
Conductor Average Diameter	0.041"
Rip cord	Polyester
Shield	None
Drain	None
Spline/Filler	Fluoropolymer mini filler
Jacket Material	FR-PVC
Overall Cable Diameter	0.214" Nom. (5.435mm)
Jacket Average Wall	0.015"± .002 (0.381mm)
Approximate Cable Weight	28 Lbs./1MFT Nom.
Flame Rating	NFPA 262 FT6

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)
Operating Voltage Rating	300V RMS
DC Resistance	8.3Ω/100m
Mutual Capacitance	4.63 nF/100m
Resistance Unbalance	0.5%
Capacitance Unbalance	19.5pF/100m
Input Impedance	100Ω ±15%
Delay Skew	11.08ns/100m
NVP %	73.80%
Electrical Performance Standards	ANSI/TIA-568.2-D

Electrical Specifications:
CAT6DSS ELECTRICAL SPECIFICATIONS

FREQ (MHz)	INSERTION LOSS		NEXT		PS NEXT		ACR-N	
	TIA-568.2-E	TRANS CABLE	TIA-568.2-D	TRANS CABLE	TIA-568.2-D	TRANS CABLE	TIA-568.2-D	TRANS CABLE
1	1.8	1.7	93.4	97.5	90.7	91.3	91.6	95.8
4	3.6	3.5	83.3	90.2	81.4	83.1	79.8	86.7
8	5.1	4.9	76.5	84.8	75.2	78.5	71.5	79.8
10	5.7	5.5	80.4	79.3	77.7	74.0	74.7	73.8
16	7.3	7.0	71.4	80.1	69.0	74.4	64.2	73.1
20	8.1	7.9	72.1	83.2	69.8	73.2	64.1	75.3
25	9.1	8.9	70.3	77.9	66.5	72.5	61.2	69.0
31.25	10.3	10.0	65.1	78.9	63.6	70.8	54.9	69.0
62.5	14.7	14.4	64.1	71.0	62.7	65.2	49.4	56.7
100	18.8	18.4	60.1	64.5	57.7	58.0	41.4	46.2
250	30.7	30.0	52.6	58.6	49.5	52.9	22.3	28.7
300		33.0		60.4		54.5		27.5
400		38.8		58.5		51.2		19.7
500		44.0		58.0		50.9		14.1
550		46.2		52.8		45.0		6.6

FREQ (MHz)	PSACR-N		ACR-F		PSACR-F		RETURN LOSS	
	TIA-568.2-E	TRANS CABLE	TIA-568.2-D	TRANS CABLE	TIA-568.2-D	TRANS CABLE	TIA-568.2-D	TRANS CABLE
1	89	89.5	86.3	96.4	83.7	90.7	21.2	34.5
4	77.9	79.6	74.0	88.2	71.1	80.7	29.0	31.1
8	70.1	73.6	67.8	79.2	64.9	73.0	31.9	31.9
10	72.0	68.4	66.0	75.0	63.1	69.7	29.5	32.8
16	61.8	67.4	61.8	72.9	59.1	65.8	32.6	32.8
20	61.7	65.3	60.2	72.2	57.7	65.1	31.5	34.9
25	57.4	63.2	58.5	67.1	56.6	60.8	30.2	33.4
31.25	53.3	60.9	56.3	64.9	55	57.8	31.1	31.5
62.5	48.1	50.8	48.7	58.9	45.6	50.7	32.7	34.2
100	39.0	39.6	42.9	52.1	41.2	44.4	31.9	32.0
250	18.8	22.9	28.0	34.1	27.1	27.6	26.5	25.0
300		21.5		28.7		23.2		22.5
400		12.4		19.9		11.0		20.0
500		6.9		11.7		5.7		20.6
550		1.2		10.7		4.6		19.9

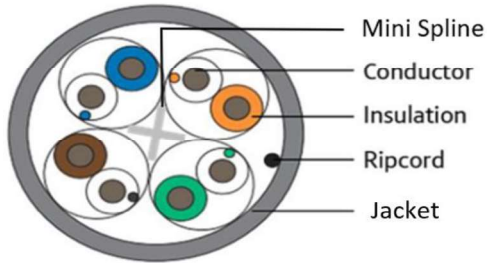
Parameters above 250Mhz are for internal use only.

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

Mechanical Properties:

Max. Recommended Pull Tension:	25 Lbs.
Min. Bend Radius (Installed)	0.9" Min
RoHS Compliant	Yes
Footage marker	Dual sequential footage marker on jacket
Standard Length	1000 FT
Packaging	Reelex Air® Box, Plastic reel



Additional information:

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

Trans Cable Part #	Jacket Color	RAL Number
FCAT238-001-DSS	BLACK	9005
FCAT238-002-DSS	BLUE	5010
FCAT238-003-DSS	GREEN	6029
FCAT238-004-DSS	GRAY	7043
FCAT238-005-DSS	ORANGE	2011
FCAT238-006-DSS	PINK	3015
FCAT238-007-DSS	PURPLE	4007
FCAT238-008-DSS	RED	3002
FCAT238-009-DSS	WHITE	9001
FCAT238-010-DSS	YELLOW	1023



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