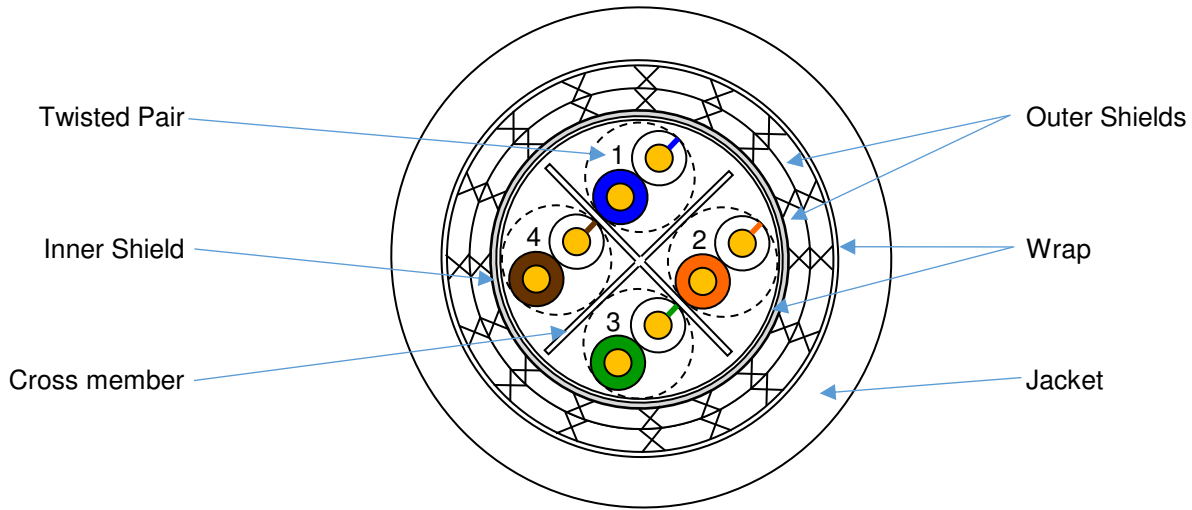


# C6A-24B134XN1FA

## CAT6A CABLE, AWG24, SF/UTP (DOUBLE OUTER SHIELD), FDR-25 JACKETED

This specification sheet forms a part of the latest issue of reference standard ANSI/TIA-568.2, IEC 61156-6 and TE Jacket Specification WCD2002 (As applicable)



CONSTRUCTION DETAILS		
PAIR COMPONENT		NOMINAL OD (mm)
CONDUCTOR:	AWG24, 7/0.20, Stranded, Tin coated copper	0.61
INSULATION:	HDPE	1.16
PAIR CABLING:	2 of HDPE component	2.32
CABLE ASSEMBLY		NOMINAL OD (mm)
COMPONENT BUNDLE:	4 of HDPE Pair component 1 of Cross member PET, Nominal thickness 0.03mm	6.06
INNER SHIELD:	AL-Foil - Conductive side out	6.26
OUTER SHIELD 1:	AWG36, Tin-coated copper 90% Nominal coverage	6.86
OUTER SHIELD 2:	AWG36, Tin-coated copper Optimised	7.42
WRAP:	PET, Nominal thickness: 0.03mm	7.52
OUTER JACKET:	FDR-25 Minimum wall: 0.75mm	9.52 ±0.48
FINISHED CABLE		
WEIGHT:	127.7 kg/km Nominal	

COLOUR CODING & IDENTIFICATION		
PAIR COMPONENT	CONDUCTOR #1	CONDUCTOR #2
# 1	96 (White/Blue)	6 (Blue)
# 2	93 (White/Orange)	3 (Orange)
# 3	95 (White/Green)	5 (Green)
# 4	91 (White/Brown)	1 (Brown)
OUTER JACKET		
JACKET COLOUR:	Jacket colour to be appended to part description in accordance with MIL-STD 681. (Colours subject to availability) e.g: C6A-24B134XN1FA-0 has a black jacket.	
JACKET IDENTIFICATION:	"RAYCHEM - C6A-24B134XN1FA - Year of Manufacture - Batch Number" Jacket identification to be marked in legible, contrasting colour. (Either black or white subject to jacket colour)	



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TECHNICAL DATA AND SPECIFICATIONS									
ELECTRICAL CHARACTERISTICS - TABLE I *									
Frequency MHz	Insertion Loss dB/100m (Max)	Return Loss dB/100m (Min)	NEXT dB/100m (Min)	ACRF dB/100m (Min)	PS NEXT dB/100m (Min)	PSACRF dB/100m (Min)	TCL dB/100m (Min)	ELTCL dB/100m (Min)	Propagation Delay ns/100m (Max)
1**	2.4	20.0	74.3	67.8	72.3	64.8	40.0	35.0	570
4	4.6	23.0	65.3	55.8	63.3	52.8	40.0	23.0	552
8	6.4	24.5	60.8	49.7	58.8	46.7	40.0	16.9	547
10	7.1	25.0	59.3	47.8	57.3	44.8	40.0	15.0	545
16	9.0	25.0	56.2	43.7	54.2	40.7	38.0	10.9	543
20	10.0	25.0	54.8	41.8	52.8	33.8	37.0	9.0	542
25	11.3	24.2	53.3	39.8	51.3	36.8	36.0	7.0	541
31.25	12.6	23.3	51.9	37.9	49.9	34.9	35.1	5.5	540
62.5	18.0	20.7	47.4	31.9	45.4	28.9	32.0	--	539
100	22.9	19.0	44.3	27.8	42.3	24.8	30.0	--	538
200	33.1	16.4	39.8	21.8	37.8	18.8	27.0	--	537
250	37.3	15.6	38.3	19.8	36.3	16.8	26.0	--	536
300	41.2	14.9	37.1	18.3	35.1	15.3	25.2	--	536
400	48.1	13.8	35.3	15.8	33.3	12.8	24.0	--	536
500	54.4	13.0	33.8	13.8	31.8	10.8	23.0	--	536

\* Note: Values in Table I for RL and NEXT are for reference only. Actual values shall be determined utilizing the formulas in ANSI/TIA-568.2 (Issue in effect)

\*\* Note: Cable performance is achieved by design only and thus is used for engineering information only.

ELECTRICAL CHARACTERISTICS - CONTINUED	
IMPEDANCE:	100 Ohms Nominal @ 1 to 500MHz
CAPACITANCE:	Mutual capacitance: ≤ 5.6nF/100m Nominal @ 1kHz Pair to ground capacitance unbalance: ≤ 160pF/100m
VELOCITY OF PROPAGATION:	65% Nominal
OPTIMISED SHIELD:	Max Surface Transfer Impedance of 100 milliOhms/metre @ 30 MHz
INSERTION LOSS NOTE:	IL Values IAW TIA 568.2 (Issue in effect) 24 AWG Stranded (120% of solid conductor values)
ADDITIONAL REQUIREMENTS / INFORMATION	
COMPONENT / ELECTRICAL	In accordance with reference standard ANSI/TIA-568.2 & IEC 61156-6 (Issue in effect)
JACKET MATERIAL	TE Specification WCD2002, Clause 5.9
FINISHED CABLE	TE Specification WCD2002, Clause 6.1 (As applicable)
TEMPERATURE RATING:	-40°C to +75°C
DELAY SKEW:	45 ns/100m Maximum
DC RESISTANCE:	145 Ω/km Maximum @ 20°C
OPERATING VOLTAGE:	300V Maximum
NOTES	
Other codes and suffixes may be added to the part description, as necessary, to capture any additional requirements imposed by the purchase order. Users should evaluate the suitability of this product for their application.	