Detailed Specifications & Technical Data



7834ANC

Category 6 UTP Halogen Free Cable



Description:

23 AWG solid bare copper conductors, non-plenum, Polyolefin insulation, twisted pairs, central spline, rip cord, see color code chart (below), LSZH jacket (blue or grey).

SUITABLE APPLICATIONS:

Suitable Applications	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG		
11	ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite		
	Video, AES/EBU, Digital Video, RS-422, 250MHz Category 6		

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Pairs	4
Total Number of Conductors	8
AWG	23
Stranding	Solid
Conductor Material	BC - Bare Copper
INSULATION:	

Insulation Material	PO - Polyolefin
Insulation Nominal Diameter	1.0 mm
Pair Color Code Chart:	

Pair Number	Insulation Color		
	Wire 1	Wire 2	
1	Blue	White with Blue Markings	
2	Orange	White with Orange Markings	
3	Green	White with Green Markings	
4	Brown	White with Brown Markings	

OVERALL CABLING:

Overall Cabling Fillers	Central Spline
OUTER SHIELD:	
Outer Shield Material	Unshielded



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OUTER JACKET:						
Outer Jacket Material	LSZH – Low Smoke Zero Halogen					
Outer Jacket Ripcord	Yes					
OVERALL NOMINAL DIAMETER:						
Overall Nominal Diameter	5.8 mm					
MECHNICAL CHARACTERISTICS:						
Operating Temperature Range	- 20°C To + 75°C					
Bulk Cable Nominal Weight	38 kg/km					
Max. Recommended Pulling Tension	110 N					
Min. Bend Radius (Install)	28.4 mm					
APPLICABLE SPECIFICATION AGENCY COMPLIANCE:						
APPLICABLE STANDARDS:						
IEC Specification	11801 Category 6					
EU RoHS Compliant (Y/N)	Y					
EU RoHS Compliance Date	Sept 2007					
TIA Specification	568-C.2 Category 6					
Other Specification	NEMA WC-63.1 Category 6					
FLAME TEST:						
IEC Flame Test	IEC 60332-3-22					
SUITABILITY:						
Suitability – Indoor (Y/N)	Y					
Non-halogenated	Y					
PLENUM/NON-PLENUM:						
Plenum (Y/N)	Ν					
ELECTRICAL CHARACTERISTICS:						
Nom. Mutual Capacitance @ 1 KHz	5.6 nF/100m					
Maximum Capacitance Unbalance	330 pF/100m					
Nominal Velocity of Propagation	65 %					
Maximum Delay @ 100 MHz	538 ns/100m					
Maximum Delay Skew	45 ns/100m					
Maximum Conductor DC Resistance @ 20 Deg.C	9.38 Ohms/100m					
Maximum DCR Unbalance @ 20 Deg.C	5 %					
Characteristic Impedance	100 ± 15 Ohms					
Intended Operating Voltage	80 V RMS					
OTHER PROPERTIES:						

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Halogen Content per IEC 60754-1						
Acid Gas Emission pH per IEC 60754-2						

Acid Gas Emission Conductivity per IEC 60754-2

Smoke Density as per IEC 61034-2

\geq 4.3 \leq 10 µs/mm \geq 60% Light Transmittance

 $\leq 5 \text{ mg/g}$

ELECTRICAL CHARACTERISTICS - PREMISES:

Premise Cable Electricals Table 1:

Frequency (MHz)	Max. Attenuation (dB/100m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. Return Loss (dB)	TCL	ELTCTL	Min. ACRF (dB)	Min. PSACRF (dB)
4	3.8	66.3	63.3	23.0	40	23	56.0	53.0
10	6.0	60.3	57.3	25.0	40	15	48.0	45.0
16	7.6	57.2	54.2	25.0	38	10.9	43.9	40.9
20	8.5	55.8	52.8	25.0	37	9	42.0	39.0
31.25	10.7	52.9	49.9	23.6	35.1	5.1	38.1	35.1
62.5	15.5	48.4	45.4	21.5	32	/	32.1	29.1
100	19.9	45.3	42.3	20.1	30	/	28.0	25.0
150	24.8	42.7	39.7	18.9	/	/	24.5	21.5
200	29.1	40.8	37.8	18.0	27	/	22.0	19.0
250	33	39.3	36.3	17.3	26	/	20.0	17.0

NOTES:

Notes

Jacket sequentially marked

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (kgs.)	Jacket Color
7834ANC 006U1000	4PR23 PO LSZH CAT6 UTP	1000	11.8	BLU
7834ANC 008U1000	4PR23 PO LSZH CAT6 UTP	1000	11.8	GRY

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