

ASH DATA

CAT 6A F/FTP PVC or LSZH SHEATH

COMMUNICATION LAN CABLES

APPLICATION:

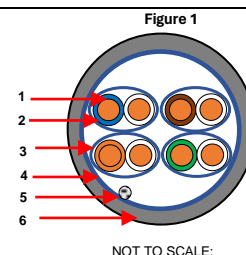
- LAN cable used in a horizontal or vertical configuration, it constitutes the base of a voice, data. Suitable for building structured cabling supports IP-based security and building automation systems that supports 500 Mbit/sec, F/UTP (Foiled/ Foiled Twisted Pair Cable)

CONSTRUCTION DETAILS

Reference Standard	ANSI TIA 568-C.2 CAT 6A & ISO/IEC 11801, IEC-61156-5		
Conductor Material	Plain annealed Copper to ASTM B3,		
Conductor Size	23 AWG Solid conductors.		
Insulation	Extruded Polyethylene compound.		
Insulation color	Pair No.	Conductor	Conductor
		A	B
	1	White/Blue Strip	Blue
	2	White/Orange Strip	Orange
	3	White/Green Strip	Green
	4	White/Brown Strip	Brown
Pair formation	Two insulated conductors are uniformly twisted to form a pair, twisted with suitable lay.		
Individual Pair Shielded	Aluminum-Polyester (AL-PET foil) laminated tape with 100% coverage and suitable overlap/		
Assembly	Four shielded pairs are assembled to form a core.		
Overall Shield	Aluminum-Polyester (AL-PET foil) laminated tape with 100% coverage and suitable overlap, in contact with tinned copper drain wire. Drain wire Size: Circular tinned copper per ASTM B33, 26 AWG (solid).		
Outer Sheathing	Extruded Flame-Retardant Polyvinyl chloride (PVC) compound. Extruded Low Smoke Zero Halogen (LSZH) Flame Retardant compound. (Indoor application)		
Rip Cord	Yes, under sheath.		
Marking (Ink Jet Printing)	ASH DATA CAT 6A F/FTP 4P X 23 AWG CU/PE/PVC ANSI/TIA 568-C.2 ISO/IEC 11801 ASHCABLES MADE IN KSA (Year of Manufacturing)		
Cable Cross sectional drawing	Figure 1		

ELECTRICAL PROPERTY

Conductor Size	23 AWG
Conductor DC Resistance @ 20°C	≤93.8 (Ω/km)
Resistance Unbalance (Max.)	2%
Capacitance conductor to conductor (Max.)	56 nF/km
Insulation Resistance (Min.)	5000 MΩ/Km (500 Volts / 1 Min.)
Dielectric Strength	1.7 kVDC for 2 Seconds
Nominal Velocity of Propagation	68%
Characteristic Impedance (MHz)	100 ± 15



NOT TO SCALE:

1. PLAIN ANNEALED SOLID COPPER CONDUCTOR
2. PE INSULATION
3. INDIVIDUAL FOIL SHIELD (AL-PET TAPE)
4. OVERALL FOIL SHIELD (AL-PET TAPE)
5. DRAIN WIRE
6. PVC OR LSZH FINAL JACKET

DIMENSIONAL DATA SHEET

S/N	ASH CABLES ITEM CODE	No. of Pairs X size (AWG)	OUTER SHEATH THICKNESS NOM. (mm)	APPRX. CABLE DIAMETER (mm)	Approx. Cable Weight (kg/km)	Standard Length (feet/mts)
1	DFA6-04P23AWG-UGRXA	4P X 23AWG	0.50	6.80	50	1000/305

Dimensions and Weights are subject for manufacturing Tolerance.
Diameter Tolerance: ± 1.0 mm

PERFORMANCE CHARACTERISTICS

Frequency (Mhz)	Max. Attenuation (dB/100m)	Return Loss (RL) dB (min)	NEXT LOSS (dB)(min)	PSNEXT LOSS (dB)(min)	ACRF (dB/100m)(min)	PSACRF (dB/100m)(min)	Propagation Delay ns/100m (Max)	TCL (dB) (Min.)
1	2.3	19.0	65.0	62.0	63.3	60.3	580	40.0
4	4.2	19.0	63.0	60.5	51.2	48.2	562	40.0
8	5.8	19.0	58.2	55.6	45.2	42.2	557	36.5
10	6.5	19.0	56.6	54.0	43.3	40.3	555	35.0
16	8.2	18.0	53.2	50.6	39.2	36.2	553	31.9
20	9.2	17.5	51.6	49.0	37.2	34.2	552	30.5
25	10.2	17.0	50.0	47.3	35.3	32.3	551	29.0
31.25	11.5	16.5	48.4	45.7	33.4	30.4	550	27.6
62.5	16.4	14.0	43.4	40.6	27.3	24.3	549	23.1
100	20.9	12.0	39.9	37.1	23.3	20.3	548	20.0
200	30.1	9.0	34.8	31.9	17.2	14.2	547	15.5
250	33.9	8.0	33.1	30.2	15.3	12.3	546	14.0
300	37.4	7.2	31.7	28.8	13.7	10.7	546	12.8
400	43.7	6.0	28.7	25.8	11.2	8.2	546	11.0
500	49.3	6.0	26.1	23.2	9.3	6.3	546	9.5

FLAME BEHAVIOUR, MECHANICAL & ENVIRONMENTAL PROPERTY

Operating Temperature	-20°C to 70°C
Bending Radius	8 X Cable Outer Diameter
Flame Retardance	Pass Flame retardant test requirement as per IEC:60332-1
PACKING	1000FT/305M Spool
	Each spools/drum shall be marked with ASH cables standard practice.