

CAT.6A Armored Cables Series

Technical Data Sheet

CableMAX Model No. **CM-1002XXARMBSTK**

Rev 251006

Length	Black 28AWG
3ft.	CM-100254ARMBSTK
5ft.	CM-100256ARMBSTK
7ft.	CM-100258ARMBSTK
10ft.	CM-100261ARMBSTK
15ft.	CM-100262ARMBSTK
25ft.	CM-100268ARMBSTK
50ft.	CM-100267ARMBSTK
65ft.	CM-100269ARMBSTK

Specifications

** Information listed represents all cables within this series*

• Cable Specifications:

CAT6A UTP 4 X 1P[28AWG(7/0.12mm±0.008mm BC)]
CM PVC+SUS 304 JACKET OD: 4.9±0.20mm

• Standard Reference:

- All Category 6A Requirements as Per ANSI/TIA, ISO/IEC, and CENELEC EN Standards
- ANSI/TIA-5682-D Cat.6A
- ISO/IEC 3rd Edition 11801 Class Ea
- We Implemented RoHS Compliance for the Requirement of European Union Issued Directive 2011/65/EU

• Physical characteristic

- Rated temperature: 75°C
- Installation temperature: -20-60°C
- Operating temperature: -20-75°C
- Min bending radius:10xOD in Operation:8xOD after operation

Applications

- 1000BASE-T Gigabit Ethernet
- 10BASE-T, 100BASE-TX Fast Ethernet (IEEE 802.3)
- 100 VG - AnyLAN(IEEE802.12)
- 500MHz Broadband Video Voice, T1, ISDN

Compliance

Compliant with TIA/EIA standard by UL & ETL; RoHS Compliant



Electrical Performance

CABLE CONSTRUCTION		
Conductor	Material	Stranded Bare Copper
	Nom.O.D (mm)	7/0.12±0.008mm 28AWGx4P
Insulation HDPE	Average Thickness(mm)	0.12
	Insulation Dia.(±0.05mm)	0.61
	Unaged Elongation	Min. 300%
	Unaged Tensile Strength	Min.1.683 Kgf/mm ²
Code Color	1 Blue/Blue*White	2 Orange/Orange*White
	3 Green/Green*White	4 Brown/Brown*White
Jacket CM PVC+SUS 304	Average Thickness (mm)	0.65
	Outer Dia.(±0.20mm)	4.9
	Unaged Elongation	Min. 100%
	Unaged Tensile Strength	Min.1.407 Kgf/mm ²
	Aging at 100°C for 168Hrs	Min. elongation retention:50% Min. tensile strength retention:75%
Marking	/	

TECHNICAL PERFORMANCE			
TIA Cat 6A Channel Test			
Frequency (MHZ)	Insertion Loss	RL Min (dB)	NEXT Min (dB)
1	3.0	19.0	65.0
4	4.2	19.0	63.0
8	5.8	19.0	58.2
10	6.5	19.0	56.6
16	8.2	18.0	53.2
20	9.2	17.5	51.6
25	10.2	17.0	50.0
31.25	11.5	16.5	48.4
62.25	16.4	14.0	43.4
100	20.9	12.0	39.9
200	30.1	9.0	34.8
250	33.9	8.0	33.1
350	40.6	6.6	30.3
450	46.5	6.0	27.3
500	49.3	6.0	26.1

CHARACTERISTICS	
Dielectric Strength of Insulation	1500 V dc / 1 minute
Insulation Resistance Test	Min. 5000 MΩ·Km
Conductor Resistance	Max. 28.45 Ω/100m at 20°C
Resistance Unbalance	Max. 2%
Capacitance Unbalance	Max. 220 pF/100m

Frequency (MHZ)	PS NEXT Min(dB)	ELFEXT Min(dB)	PSELFEXT Min(dB)	Impedance (Ohms)
1	62.0	63.3	60.3	100±15
4	60.5	51.2	48.2	
8	55.6	45.2	42.2	
10	54.0	43.3	40.3	
16	50.6	39.2	36.2	
20	49.0	37.2	34.2	
25	47.3	35.3	32.3	
31.25	45.7	33.4	30.4	
62.25	40.6	27.3	24.3	
100	37.1	23.3	20.3	
200	31.9	17.2	14.2	
250	30.2	15.3	12.3	
350	27.3	12.4	9.4	
450	24.4	10.2	7.2	
500	23.2	9.3	6.3	

Configuration

Cable Cross-Section Structure

