

Cat.5E UTP Booted Cables Series

Technical Data Sheet

CableMAX Model No. **CM-1005XXXXBSTK**

Digi-Key Series: **CM-10055EU**

Rev 250619

Length	Black	Blue	Grey	Green	Orange	Red	White	Yellow	Purple
0.5ft.	CM-100516BKBSTK	CM-100516BLBSTK	CM-100516GYBSTK	CM-100516GNBSTK	CM-100516ORBSTK	CM-100516RDBSTK	CM-100516WTBSTK	CM-100516YWBSTK	CM-100516PUBSTK
1ft.	CM-100501BKBSTK	CM-100501BLBSTK	CM-100501GYBSTK	CM-100501GNBSTK	CM-100501ORBSTK	CM-100501RDBSTK	CM-100501WTBSTK	CM-100501YWBSTK	CM-100501PUBSTK
1.5ft.	CM-100517BKBSTK	CM-100517BLBSTK	CM-100517GYBSTK	CM-100517GNBSTK	CM-100517ORBSTK	CM-100517RDBSTK	CM-100517WTBSTK	CM-100517YWBSTK	CM-100517PUBSTK
2ft.	CM-100502BKBSTK	CM-100502BLBSTK	CM-100502GYBSTK	CM-100502GNBSTK	CM-100502ORBSTK	CM-100502RDBSTK	CM-100502WTBSTK	CM-100502YWBSTK	CM-100502PUBSTK
3ft.	CM-100503BKBSTK	CM-100503BLBSTK	CM-100503GYBSTK	CM-100503GNBSTK	CM-100503ORBSTK	CM-100503RDBSTK	CM-100503WTBSTK	CM-100503YWBSTK	CM-100503PUBSTK
4ft.	CM-100500BKBSTK	CM-100500BLBSTK	CM-100500GYBSTK	CM-100500GNBSTK	CM-100500ORBSTK	CM-100500RDBSTK	CM-100500WTBSTK	CM-100500YWBSTK	CM-100500PUBSTK
5ft.	CM-100504BKBSTK	CM-100504BLBSTK	CM-100504GYBSTK	CM-100504GNBSTK	CM-100504ORBSTK	CM-100504RDBSTK	CM-100504WTBSTK	CM-100504YWBSTK	CM-100504PUBSTK
6ft.	CM-100513BKBSTK	CM-100513BLBSTK	CM-100513GYBSTK	CM-100513GNBSTK	CM-100513ORBSTK	CM-100513RDBSTK	CM-100513WTBSTK	CM-100513YWBSTK	CM-100513PUBSTK
7ft.	CM-100505BKBSTK	CM-100505BLBSTK	CM-100505GYBSTK	CM-100505GNBSTK	CM-100505ORBSTK	CM-100505RDBSTK	CM-100505WTBSTK	CM-100505YWBSTK	CM-100505PUBSTK
8ft.	CM-100541BKBSTK	CM-100541BLBSTK	CM-100541GYBSTK	CM-100541GNBSTK	CM-100541ORBSTK	CM-100541RDBSTK	CM-100541WTBSTK	CM-100541YWBSTK	CM-100541PUBSTK
9ft.	CM-100542BKBSTK	CM-100542BLBSTK	CM-100542GYBSTK	CM-100542GNBSTK	CM-100542ORBSTK	CM-100542RDBSTK	CM-100542WTBSTK	CM-100542YWBSTK	CM-100542PUBSTK
10ft.	CM-100506BKBSTK	CM-100506BLBSTK	CM-100506GYBSTK	CM-100506GNBSTK	CM-100506ORBSTK	CM-100506RDBSTK	CM-100506WTBSTK	CM-100506YWBSTK	CM-100506PUBSTK
12ft.	CM-100540BKBSTK	CM-100540BLBSTK	CM-100540GYBSTK	CM-100540GNBSTK	CM-100540ORBSTK	CM-100540RDBSTK	CM-100540WTBSTK	CM-100540YWBSTK	CM-100540PUBSTK
15ft.	CM-100507BKBSTK	CM-100507BLBSTK	CM-100507GYBSTK	CM-100507GNBSTK	CM-100507ORBSTK	CM-100507RDBSTK	CM-100507WTBSTK	CM-100507YWBSTK	CM-100507PUBSTK
20ft.	CM-100514BKBSTK	CM-100514BLBSTK	CM-100514GYBSTK	CM-100514GNBSTK	CM-100514ORBSTK	CM-100514RDBSTK	CM-100514WTBSTK	CM-100514YWBSTK	CM-100514PUBSTK
25ft.	CM-100508BKBSTK	CM-100508BLBSTK	CM-100508GYBSTK	CM-100508GNBSTK	CM-100508ORBSTK	CM-100508RDBSTK	CM-100508WTBSTK	CM-100508YWBSTK	CM-100508PUBSTK
30ft.	CM-100519BKBSTK	CM-100519BLBSTK	CM-100519GYBSTK	CM-100519GNBSTK	CM-100519ORBSTK	CM-100519RDBSTK	CM-100519WTBSTK	CM-100519YWBSTK	CM-100519PUBSTK
35ft.	CM-100518BKBSTK	CM-100518BLBSTK	CM-100518GYBSTK	CM-100518GNBSTK	CM-100518ORBSTK	CM-100518RDBSTK	CM-100518WTBSTK	CM-100518YWBSTK	CM-100518PUBSTK
40ft.	CM-100520BKBSTK	CM-100520BLBSTK	CM-100520GYBSTK	CM-100520GNBSTK	CM-100520ORBSTK	CM-100520RDBSTK	CM-100520WTBSTK	CM-100520YWBSTK	CM-100520PUBSTK
50ft.	CM-100509BKBSTK	CM-100509BLBSTK	CM-100509GYBSTK	CM-100509GNBSTK	CM-100509ORBSTK	CM-100509RDBSTK	CM-100509WTBSTK	CM-100509YWBSTK	CM-100509PUBSTK
75ft.	CM-100510BKBSTK	CM-100510BLBSTK	CM-100510GYBSTK	CM-100510GNBSTK	CM-100510ORBSTK	CM-100510RDBSTK	CM-100510WTBSTK	CM-100510YWBSTK	CM-100510PUBSTK
100ft.	CM-100511BKBSTK	CM-100511BLBSTK	CM-100511GYBSTK	CM-100511GNBSTK	CM-100511ORBSTK	CM-100511RDBSTK	CM-100511WTBSTK	CM-100511YWBSTK	CM-100511PUBSTK
125ft.	CM-100543BKBSTK	CM-100543BLBSTK	CM-100543GYBSTK	CM-100543GNBSTK	CM-100543ORBSTK	CM-100543RDBSTK	CM-100543WTBSTK	CM-100543YWBSTK	CM-100543PUBSTK
150ft.	CM-100512BKBSTK	CM-100512BLBSTK	CM-100512GYBSTK	CM-100512GNBSTK	CM-100512ORBSTK	CM-100512RDBSTK	CM-100512WTBSTK	CM-100512YWBSTK	CM-100512PUBSTK
175ft.	CM-100544BKBSTK	CM-100544BLBSTK	CM-100544GYBSTK	CM-100544GNBSTK	CM-100544ORBSTK	CM-100544RDBSTK	CM-100544WTBSTK	CM-100544YWBSTK	CM-100544PUBSTK
200ft.	CM-100515BKBSTK	CM-100515BLBSTK	CM-100515GYBSTK	CM-100515GNBSTK	CM-100515ORBSTK	CM-100515RDBSTK	CM-100515WTBSTK	CM-100515YWBSTK	CM-100515PUBSTK

Specifications

* Information listed represents all cables within this series

• Cable Specifications:

CAT5E UTP 4 X 1P[24AWG(7/0.175mm±0.008mm BC)]
CM PVC JACKET OD: 5.3±0.20mm

• Standard Reference:

- All Category 5e Requirements as Per ANSI/TIA, ISO/IEC, and CENELEC EN Standards
- ANSI/TIA-5682-D Cat.5e
- ISO/IEC 3rd Edition 11801 Class D
- 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:15xOD in Operation:10xOD after operation

• Application

- 1000BASE-T Gigabit Ethernet
- 10BASE-T, 100BASE-TX Fast Ethernet (IEEE 802.3)
- 100 VG - AnyLAN(IEEE802.12)
- 100MHz 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)	7/0.175±0.008mm 24AWGx4P
Insulation HDPE	Average Thickness(mm)	0.20
	Insulation Dia.(±0.05mm)	0.75
	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	Average Thickness (mm)	0.6
	Outer Dia.(±0.20mm)	5.3
	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	YFC UTP CAT.5E 350MHZ PATCH ISO/IEC 11801 & EN 50288 & ANSI/TIA-568.2-D 3P CONFORMS TO GIGABIT ETHERNET ▲ 24AWGX4P TYPE CM(UL) E164469-B3	

TECHNICAL PERFORMANCE			
TIA Cat 5E Channel Test			
Frequency (MHz)	Insertion Loss	RL Min (dB)	NEXT Min (dB)
1	3.0	17.0	60.0
4	4.5	17.0	53.5
8	6.3	17.0	48.6
10	7.1	17.0	47.0
16	9.1	17.0	43.6
20	10.2	17.0	42.0
25	11.4	16.0	40.3
31.25	12.9	15.1	38.7
62.25	18.6	12.1	33.6
100	24.0	10.0	30.1

Frequency (MHz)	PSNEXT (dB/100m)	ACR-F (dB/100m)	PS ACR-F (dB/100m)	Impedance (Ohms)
1	57.0	57.4	54.4	100±15
4	50.5	45.4	42.4	
8	45.6	39.3	36.3	
10	44.0	37.4	34.4	
16	40.6	33.3	30.3	
20	39.0	31.4	28.4	
25	37.3	29.4	26.4	
31.25	35.7	27.5	24.5	
62.25	30.6	21.5	18.5	
100	37.1	17.4	14.4	

CHARACTERISTICS	
Dielectric Strength of Insulation	1500 V dc / 1 minute
Insulation Resistance Test	Min. 5000 MΩ·Km
Conductor Resistance	Max. 11.25 Ω/100m at 20°C
Resistance Unbalance	Max. 2%
Capacitance Unbalance	Max. 220 pF/100m

Configuration

Cable Cross-Section Structure

