

Ethernet Cable, Cat6A, Direct Burial, F/UTP

RoHS  
Compliant

Stock No.: CAT6A-3041D-FTP-B

## FEATURES

- CMX
- F/UTP
- 23 AWG
- Solid Copper



## Product Description

## Key Features

- Bandwidth tested up to 750 MHz
- In compliance with ANSI/TIA 568.2-E
- Supports Power over Ethernet: PoE/PoE+/PoE++ (IEEE 802.3af/at/bt) 4PPoE up to 100W
- Suitable for 1 Gigabit and 10 Gigabit Ethernet up to 328 ft
- CMX jacket can withstand sunlight, dirt, snow, and moisture
- cETLus Certified, RoHS-3 Compliant

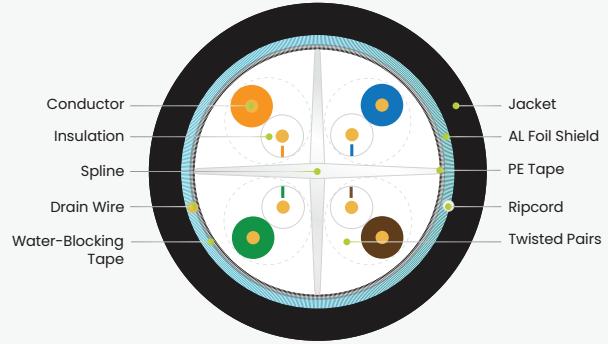
## General Specifications

Attribute	Value
Terminated/Unterminated	Unterminated
Connector Type	RJ45
Cable Type	Ethernet
Length	1000ft Per Spool
Gauge	23 AWG
Conductor	Bare Copper
Shield/Unshielded	Shielded
Voltage Rating	300V
1.0 - 550MHz Impedance ( $\Omega$ )	100 $\pm$ 15
Maximum Operating Frequency	750MHz
Operating & Storage Temp.	-40°C to 75°C   -40°F to 167°F
Installation Temp.	-20°C to 75°C   -4°F to 167°F
Jacket Color	Black

## Product Drawing

### Technical Data

Insulation	PE	Color of Pairs
Average Thickness (mm)	0.278	Pair 1 Blue- White/Blue
Min Point Thickness (mm)	0.255	Pair 2 Orange- White/Orange
<b>Conductor Insulation Dia. (<math>\pm 0.02</math>mm)</b>	<b>1.14</b>	Pair 3 Green- White/Green
Twisted Pair Dia. ( $\pm 0.02$ mm)	2.28	Pair 4 Brown- White/Brown
Ripcord	Nylon	
Spline	PE	
Polyethylene Tape	Present	
Shielding	F/UTP	
Drain Wire- Solid Tinned Copper (mm)	0.40	
Water Resistance	Jacket & Dry Tape	
Conductor	Solid Bare Copper	Cable Jacket
Size	23AWG	LLDPE
Conductor Dia. ( $\pm 0.05$ mm)	0.585	Average Thickness (mm) 0.60
<b>Standards Reference</b>		Min. Point Thickness (mm) 0.55
UL-444 / CETLus	ANSI/TIA 568.2-E	<b>Outer Diameter (<math>\pm 0.2</math>mm)</b> 7.60
ISO/IEC 11801		



### Electrical Characteristics

<b>PoE Certification</b>	PoE/PoE+/PoE++ 4PPoE
<b>Maximum PoE Wattage</b>	100W
<b>PoE Application Compatibility</b>	802.3af/at/bt Type 4
<b>TIA 568-2.D Cat6A Permanent Link +PoE</b>	CERTIFIED
<b>Maximum Application Speed @ 295ft</b>	10GBASE-T
<b>Nominal Velocity of Propagation (NVP)</b>	67.0
<b>Maximum Operating Voltage</b>	300V
<b>1.0 - 750MHz Impedance (<math>\Omega</math>)</b>	100 $\pm$ 15
<b>Maximum Operating Frequency</b>	750MHz
<b>1.0 - 750MHz Delay Skew (ns/100m)</b>	$\leq$ 45
<b>Pair-to-Ground Capacitance Unbalance (pF/km)</b>	$\leq$ 3300
<b>Max. Conductor DC Resistance 20°C (<math>\Omega</math>/km)</b>	68



## Mechanical & Environmental Operating Parameters

<b>Test Object</b>	Jacket	<b>Aging Condition (°C x hrs)</b>	100 x 168
<b>Test Material</b>	LLDPE	<b>After Tensile Strength (Mpa)</b>	≥85% of unaged
<b>Before- Tensile Strength (Mpa)</b>	≥13.8	<b>Aging Condition - Elongation (%)</b>	≥50% of unaged
<b>Aging- Elongation (%)</b>	≥100	<b>Cold Bend(-20 ± 2°C x 4hrs)</b>	No Crack
<b>Min. Bend Radius</b>	5.5cm/2.00in	<b>Operating &amp; Storage Temp.</b>	-40°C to 75°C   -40°F to 167°F
<b>Max. Installation Tension</b>	110N/25lb-ft	<b>Installation Temp.</b>	-20°C to 75°C   -4°F to 167°F

## Print Legend

EASE CAT6A CMX FTP DIRECT BURIAL UV 75°C 4PR 23AWG c(ETL)us VERIFIED TO ANSI/TIA 568.2-E 750MHz

Dimensions: Millimeters (Inches)

## Part Number Table

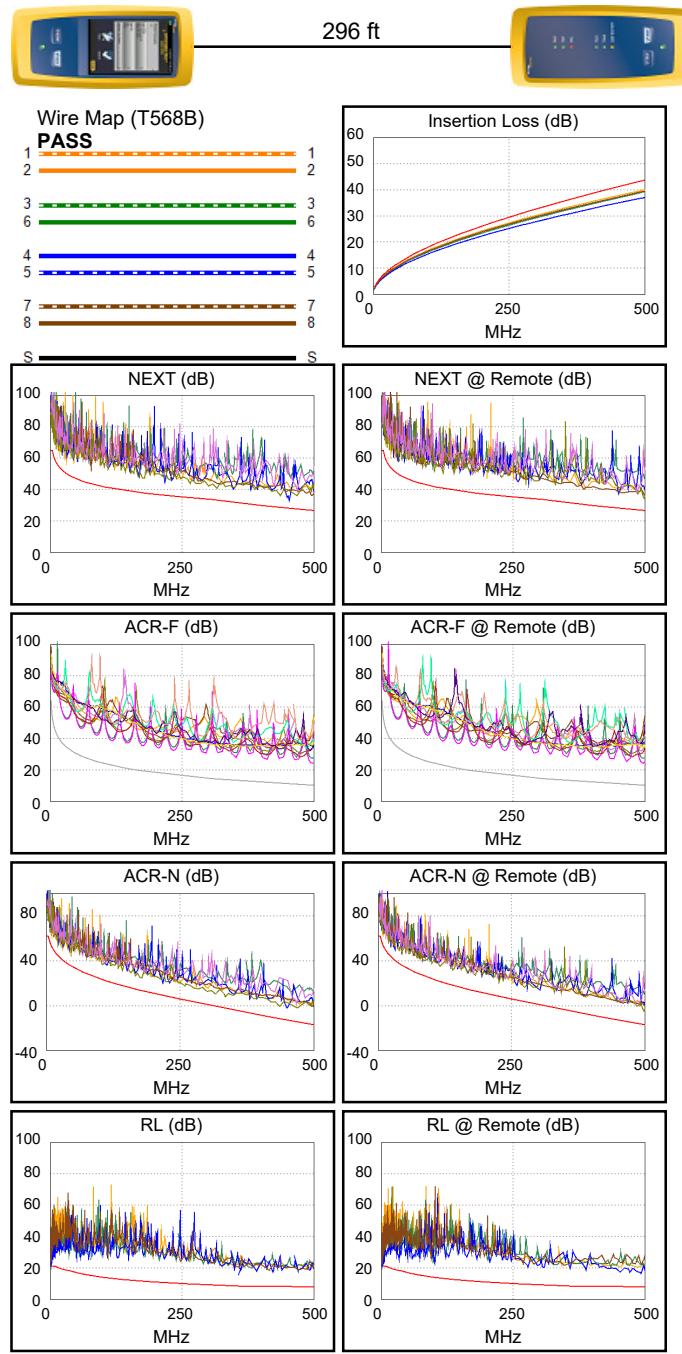
Part Number	Description
CAT6A-3041D-FTP-B	Ethernet Cable, Cat6A, Direct Burial, F/UTP

Important Notice: This data sheet and its contents (the "Information") belong to the members of the EASE group of companies (the "Group") or are licensed to it. No license is granted for the use of it other than for information purposes in connection with the products to which it relates. No license of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate, but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. EASE is the registered trademark of Ease Electronics Co., Limited 2019.



Test Summary: **PASS**

Length (ft), Limit 295	[Pair 4,5]	296
Prop. Delay (ns), Limit 498	[Pair 1,2]	485
Delay Skew (ns), Limit 44	[Pair 1,2]	36
Resistance (ohms), Limit 21.00	[Pair 7,8]	13.24
Resist. Unbal. (ohms), Limit 0.400	[Pair 7,8]	0.070
Resist. P2P Unbal. (ohms), Limit 0.450	[Pair 4,5-7,8]	0.189
Insertion Loss Margin (dB)	[Pair 1,2]	3.7
Frequency (MHz)	[Pair 1,2]	500.0
Limit (dB)	[Pair 1,2]	43.8



	Worst Case Margin	Worst Case Value		
<b>PASS</b>	MAIN	SR	MAIN	SR
Worst Pair	1,2-7,8	3,6-7,8	1,2-7,8	3,6-7,8
<b>NEXT (dB)</b>	4.1	7.7	4.1	7.7
Freq. (MHz)	455.0	498.0	455.0	498.0
Limit (dB)	28.0	26.7	28.0	26.7
Worst Pair	1,2	3,6	1,2	3,6
<b>PS NEXT (dB)</b>	6.3	8.3	6.4	8.3
Freq. (MHz)	455.0	499.0	456.0	499.0
Limit (dB)	25.2	23.8	25.1	23.8

<b>PASS</b>	MAIN	SR	MAIN	SR
Worst Pair	4,5-1,2	4,5-1,2	4,5-1,2	4,5-1,2
<b>ACR-F (dB)</b>	14.0	14.0	14.0	14.0
Freq. (MHz)	497.0	497.0	497.0	497.0
Limit (dB)	10.3	10.3	10.3	10.3
Worst Pair	1,2	1,2	1,2	1,2
<b>PS ACR-F (dB)</b>	16.2	16.4	16.8	16.6
Freq. (MHz)	408.0	408.0	498.0	497.0
Limit (dB)	9.0	9.0	7.2	7.3

<b>N/A</b>	MAIN	SR	MAIN	SR
Worst Pair	1,2-7,8	1,2-7,8	1,2-7,8	3,6-7,8
<b>ACR-N (dB)</b>	8.1	9.1	8.2	11.9
Freq. (MHz)	455.0	30.9	456.0	498.0
Limit (dB)	-13.4	40.3	-13.5	-16.9
Worst Pair	1,2	1,2	1,2	3,6
<b>PS ACR-N (dB)</b>	9.7	10.2	9.7	12.7
Freq. (MHz)	456.0	30.9	456.0	499.0
Limit (dB)	-16.3	37.9	-16.3	-19.9

<b>PASS</b>	MAIN	SR	MAIN	SR
Worst Pair	4,5	4,5	4,5	4,5
<b>RL (dB)</b>	7.2	5.2	9.4	8.4
Freq. (MHz)	4.8	4.8	422.0	492.0
Limit (dB)	21.0	21.0	8.0	8.0

Compliant Network Standards:  
 10BASE-T 100BASE-TX 100BASE-T4  
 1000BASE-T 2.5GBASE-T 5GBASE-T  
 10GBASE-T ATM-25 ATM-51  
 ATM-155 100VG-AnyLan TR-4  
 TR-16 Active TR-16 Passive

LinkWare™ PC Version 10.8.1

**FLUKE**  
networks®