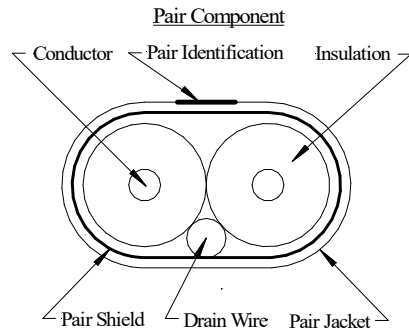


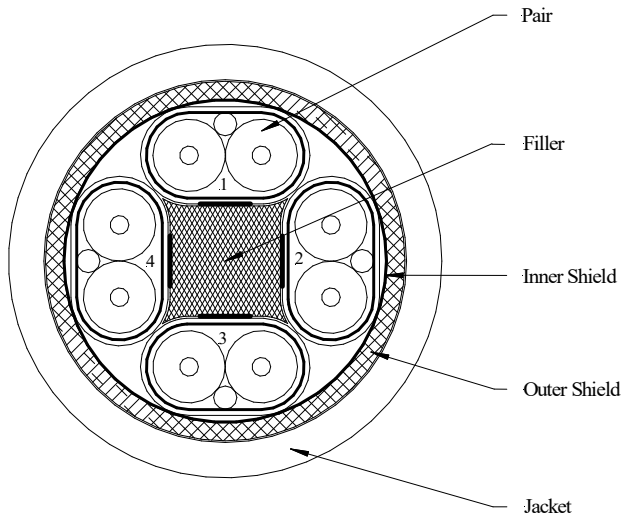
4 PAIR 26 AWG 25 GHZ TURBOTWIN™ CABLE

PROPRIETARY DESIGN

THIS CONFIDENTIAL DOCUMENT HAS BEEN RELEASED WITH THE UNDERSTANDING THAT IT SHALL NOT BE SENT TO ANYONE OTHER THAN THE ORIGINAL INTENDED RECIPIENT WITHOUT PRIOR AUTHORIZATION FROM TE CONNECTIVITY/MADISON CABLE



Final Assembly



CONSTRUCTION

Pair Component

Conductor: 26AWG Solid Silver Plated Copper, 0.0162 Inch [0.41 mm] Diameter
Insulation: 0.0198Inches [0.504 mm] of Polyolefin, 0.0559 Inch [1.42 mm] Diameter, Color – Natural

Pair: 2 Singles Laid Flat and Parallel

Drain Wire: 27AWG Solid Tin Plated Copper, 0.0142 Inch [0.36 mm] Diameter

Pair Shield: Aluminum/Polyester Tape, Aluminum Side Facing In 25% Overlap

Pair Jacket: Polyester Tape

Pair Minor Diameter: 0.064 Inches [1.62 mm] Nominal

Pair Major Diameter: 0.119 Inches [3.04 mm] Nominal

Pair Identification: To be printed on entire length of pair in 1/2 Inch [13 mm] intervals, see Table 1

Final Assembly

Layer: 4Pairs (#1-4) Cabled Together With Optional Fillers

Inner Shield: Aluminum/Polyester Tape, Aluminum Side Facing Out, 25% Overlap

Outer Shield: 38AWG Tin Plated Copper Braid, 80% Coverage

Jacket: 0.025 Inches [0.635 mm] of PVC, Color - Black

Diameter: 0.29 Inches [7.38 mm] Nominal

Print Legend (White Ink): "MADISON CABLE {Mfg. Location Code}¹ (UL)

TYPE CL2 75°C 26 AWG CSA AWM I A/B 75°C 30V FT1

TurboTwin™ 25G 104-2061 SUBSTANCE COMPLIANT 2011/65/EU

{Date Code}²

¹ Manufacturing location code, if applicable

² Date Code is a 4-digit code with the first two digits identifying the calendar week and the last two identifying the calendar year of manufacturing. Example – 0206 for cable manufactured in the second week of January 2006

TABLE 1

Pairs #	Pair Identification
1	- 1 - 1 - 1 - 1
2	- - 2 - - 2 - - 2 - - 2
3	- - - 3 - - - 3 - - - 3 - - - 3
4	- 4 - 4 - 4 - 4

ELECTRICAL CHARACTERISTICS³

Production Performance Testing:

Differential Impedance: 100 ± 5 Ohms @ TDR

Attenuation (SDD21)⁴: 15.5 db/5m Maximum @ 12.89 GHz

Return Loss (SDD11/22): ≤ -19.5 + 2√f for 0.01 GHz ≤ f ≤ 4.1 GHz
≤ -13.6 + 14Log (f/5.5) for 4.1 GHz < f ≤ 19 GHz

SCD21-SDD21:

≤ -12 for 0.01 GHz ≤ f ≤ 12.89 GHz

≤ -29 + (29/22) * f for 12.89 GHz < f ≤ 15.7 GHz

≤ -8.3 for 15.7 GHz < f ≤ 19 GHz

Differential to Common Mode Return Loss (SCD11):

≤ -24 + (20/25.78) * f for 0.01 GHz ≤ f ≤ 12.89 GHz

≤ -17 + (6/25.78) * f for 12.89 GHz < f ≤ 19 GHz

Pair-to-Pair IL Variation: 0.5 dB @ 12.89 GHz Nominal (abs (Max IL – Min IL)) among all pairs

Qualification Testing:

Mutual Capacitance⁵: 12 pF/ft [39 pF/m] Nominal

Insertion Loss Deviation: ILD_{min} = -0.8

ILD_{max} = +0.8

NEXT: -50 dB Maximum from 0.01 GHz to 19 GHz

FEXT: -50 dB Maximum from 0.01 GHz to 19 GHz

Conductor DC Resistance⁵: 0.04 Ohms/ft [133 Ohms/km] Nominal @ 20°C

³ All SI measurements made @ 20°C

⁴ Tested/Functional to 25 GHz over a 5.0meter length

⁵ Values are for informational purposes only



Madison Cable

No. 1 Tyco Road, Houjie Town
Dongguan, Guangdong, P.R. China 523958
Tel: 86-769-85815041 Fax: 86-769-85819130

Spec Number: 104-2061

Part Number: 08PE2LF003

Customer:

Customer #:

REVISION HISTORY

1	12/11/17	HL	Initial Release
2	03/14/18	HL	Revised Insulation, Pair OD
3	04/13/18	HL	Revised Drain Wire and Component OD
4	05/21/18	HL	Revised Legend and Safety Certification
5	08/15/18	HL	Revised Electrical and Mech. Characteristics
6	09/29/18	HL	Revised to Remove the Under Development

Prepared By: H. Lu

Reviewed By: W. Yao

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Users should evaluate the suitability of this product for their application. Contact factory for latest revision of specification. TE Connectivity reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to the Buyer.

4 PAIR 26 AWG 25 GHZ TURBOTWIN™ CABLE

PHYSICAL CHARACTERISTICS

Temperature Rating:**Operating:** -10°C to +60°C**Transport/Installation:** -25°C to +80°C

MECHANICAL CHARACTERISTICS

Product Validation Test: Per QS-500A (Exhibit)

INDUSTRY STANDARDS

IEEE 802.3bj: Physical Layer Specifications and Management Parameters for 100 Gb/s Operation Over Backplanes and Copper Cables**InfiniBand™ Architecture (Extended Data Rate):** 1X = 25 Gb/s
4X = 100 Gb/s

SAFETY CERTIFICATION

UL Listing: Type CL2 as specified in Article 725 of the National Electrical Code**CSA Certification:** AWM I/II A/B 75°C 30 Volts FT1**RoHS II Material Compliance:** In accordance with EU Directive 2011/65/EU for the Restriction of Hazardous Substances**Madison Cable**No. 1 Tyco Road, Houjie Town
Dongguan, Guangdong, P.R. China 523958
Tel: 86-769-85815041 Fax: 86-769-85819130**Spec Number:** 104-2061**Part Number:** 08PE2LF003**Customer:****Customer #:**

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