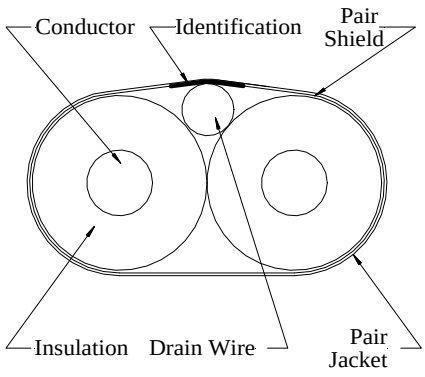
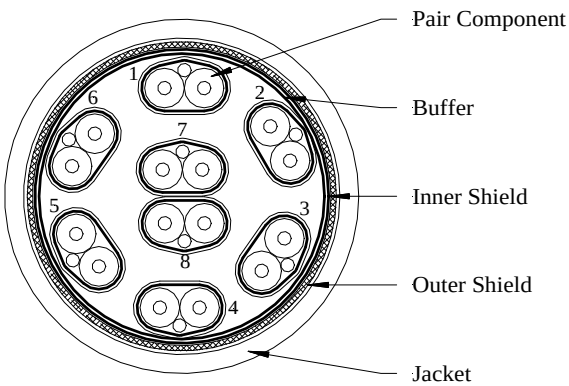
8 PAIR 28 AWG 14G TURBOTWIN™ CABLE

PROPRIETARY DESIGN

Pair Component



Final Assembly



CONSTRUCTION

Pair Component

Conductor: 28 AWG Solid Silver Plated Copper, 0.0126 Inch Diameter
Insulation: 0.0122 Inches of Foam Polyolefin, 0.037 Inch Diameter, Color – Natural
Pair: 2 Singles Laid Flat and Parallel
Drain Wire: 30 AWG Solid Tin Plated Copper, 0.010 Inch Diameter
Pair Shield: Aluminum/Polyester Tape, Aluminum Side Facing In, 25% Overlap
Color – Yellow
Pair Jacket: Polyester Tape
Pair Diameter: 0.043 x 0.080 Inches Nominal
Pair Identification: Pairs sequentially numbered on entire length of pair.

Final Assembly

Core: 8 Pairs (#1-8) Cabled Together
Buffer: Foam Polyolefin Tape
Inner Shield: Aluminum/Polyester Tape, Aluminum Side Facing Out, 25% Overlap
Outer Shield: 38 AWG Tin Plated Copper Braid, 85% Coverage
Jacket: 0.032 Inches of Flexible PVC, Color – Black
Diameter: 0.315 Inches Nominal
Print Legend (White Ink): "MADISON CABLE (UL) TYPE CL2 75°C 28 AWG
CSA AWM II A/B 75°C 30V FT4 TurboTwin™ 14G 102-0377
2011/65/EU SUBSTANCE COMPLIANT {Date Code}[1]"

[1] 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.

ELECTRICAL CHARACTERISTICS

Differential Impedance: 100 ± 5 Ohms @ TDR
Mutual Capacitance: 14 pF/ft Nominal
Time Delay: 1.35 ns/ft Nominal
Time Delay Skew (Within Pair): 43 ps/5.5 m Maximum
Time Delay Skew (Between Pairs): 300 ps/5.5 m Maximum
Attenuation (SDD21)[2]:

Frequency (GHz)	Attenuation (dB/5.5 m Nominal)
1.25	6.9
2.50	10.4
5.00	16.0
7.00	20.1
9.00	24.4
10.00	25.9
12.00	TBD
14.00	TBD

Differential to Common Mode Conversion (SCD21): 30 dB Nominal
Conductor DC Resistance: 0.066 Ohms/ft Nominal @ 20°C

[2] Tested/Functional to 14 GHz over a 5.5 meter length

MECHANICAL CHARACTERISTICS

Bend Radius (5 X OD): 1.5 Inches Minimum

SAFETY CERTIFICATION

UL Listing: Type CL2 as specified in Article 725 of the National Electrical Code
CSA Certification: AWM II A/B 75°C 30 Volts FT4
RoHS II Material Compliance: In accordance with EU Directive 2011/65/EU for the Restriction of Hazardous Substances

TE connectivity
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REVISION HISTORY

1	11/16/10	HA	Initial Release
2	03/22/11	DC	Revised drain wire
3	12/27/11	HA	Revised Electrical Characteristics & Pair/Jkt OD
4	02/05/13	RL	Revised Jkt Wall/OD and Print Legend

Spec Number:	**102-0377**				
Part Number:	**16KD2LF039**				
Customer:		**Prepared By:**	H. Abusamra		**Page**
Customer #:		**Reviewed By:**	K. Nippani	M. Dupuis	1 of 1