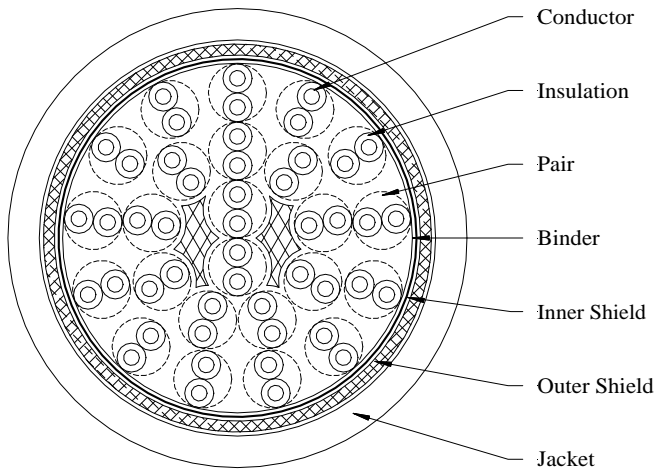


24 PAIR 24 AWG CATEGORY 5 CABLE



CONSTRUCTION

Pair Component

Conductor: 24 AWG Solid Tin Plated Copper, 0.0201 Inch Diameter

Insulation: 0.0095 Inches of Polypropylene, 0.039 Inch Diameter

Pair: 2 Insulated Conductor Twisted Together, Lay Lengths Varied Between Pairs to Minimize Crosstalk

Final Assembly

Core: 2 Pairs (#1-2) Cabled Together with Fibrillated Polypropylene Filler in Each Interstice

Layer 1: 9 Pairs (#3-11) Cabled Around Core

Layer 2: 13 Pairs (#12-24) Cabled Around Layer 1

Binder: Polyester Tape

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

Outer Shield: 36 AWG Tin Plated Copper Braid, 85% Coverage

Jacket: 0.024 Inches of PVC, Color – Telephone Gray¹

Diameter: 0.485 Inches Nominal

Print Legend (Black Ink): "MADISON CABLE (UL) TYPE CM 75°C 24 AWG RoHS COMPLIANT {Date Code}²"

¹ Per ANSI/EIA-359-A N5/

² Date Code is a 6-digit code with the first two digits identifying the calendar day, the middle two digits identifying the calendar month and the last two identifying the calendar year of manufacturing. Example: 04/05/95 for cable manufactured on May 4, 1995.

COLOR CODE

Pair #	Conductor #1	Conductor #2
1	White/Blue	Blue/White
2	White/Orange	Orange/White
3	White/Green	Green/White
4	White/Brown	Brown/White
5	White/Gray	Gray/White
6	Red/Blue	Blue/Red
7	Red/Orange	Orange/Red
8	Red/Green	Green/Red

9	Red/Brown	Brown/Red
10	Red/Gray	Gray/Red
11	Black/Blue	Blue/Black
12	Black/Orange	Orange/Black
13	Black/Green	Green/Black
14	Black/Brown	Brown/Black
15	Black/Gray	Gray/Black
16	Yellow/Blue	Blue/Yellow
17	Yellow/Orange	Orange/Yellow
18	Yellow/Green	Green/Yellow
19	Yellow/Brown	Brown/Yellow
20	Yellow/Gray	Gray/Yellow
21	Violet/Blue	Blue/Violet
22	Violet/Orange	Orange/Violet
23	Violet/Green	Green/Violet
24	Violet/Brown	Brown/Violet

ELECTRICAL CHARACTERISTICS

Frequency (MHz)	Impedance ³ (Ohms)	SRL ⁴ (dB Nom.)	Attenuation ⁵ (dB/1000 ft Nom.)	NEXT ⁶ (dB Nom.)
0.772	-	-	5.5	64
1	100 ± 15	23	6.4	62
4	100 ± 15	23	12.5	53
8	100 ± 15	23	17.7	48
10	100 ± 15	23	19.8	47
16	100 ± 15	23	25.0	44
20	100 ± 15	23	28.3	42
25	100 ± 15	22	31.7	41
31.25	100 ± 15	21	35.6	40
62.5	100 ± 15	18	51.8	35
100	100 ± 15	16	67.0	32

³ An Impedance-Like Function Fit to Data By Least Square Method, Meets this Requirement.

⁴ Values shown from 20 – 100 MHz are examples. Structural Return Loss at any frequency between 20 and 100 MHz is $23 - 10 \log_{10}(f/20)$ dB Nominal, where f is frequency in MHz and measurement is on a length ≥ 328 feet.

⁵ Values shown are examples. Attenuation at any frequency between 0.772 and 100 MHz is $5.995f^{1/2} + 0.070f + 0.152/f^{1/2}$ dB/1000 ft Nominal, where f is frequency in MHz and measurement is on a length ≥ 328 feet.

⁶ Values shown are examples. NEXT at any frequency between 0.772 and 100 MHz is $64 - 15 \log_{10}(f/0.772)$ dB Nominal, where f is frequency in MHz and measurement is on a length ≥ 328 feet.

Pair-to-Ground Capacitance Unbalance: 1000 pF/1000 ft Maximum @ 1 kHz

Time Delay: $163 + 11/f^{1/2}$ ns/100 ft Maximum from 1 – 100 MHz, where f is frequency in MHz

Time Delay Skew: 13.7 ns/100 ft Maximum from 1 – 100 MHz

Conductor DC Resistance: 28.6 Ohms/1000 ft Maximum @ 20°C

Conductor DC Resistance Unbalance: 5% Maximum

SAFETY CERTIFICATION

UL Listing: Type CM as specified in Article 800 of the National Electrical Code

RoHS Compliance: In Accordance to European Directive 2002/95/EC, Issue 13.2.2003



Madison Cable

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REVISION HISTORY

1	05/20/05	RL	Initial Release
2	10/10/05	EP	Revised jacket OD
3	04/06/06	DC	Revised print legend
4	05/10/11	HA	Revised print legend

Spec Number: 101-2578

Part Number: 48SFKLF001

Customer:

Customer #:

Prepared By: H. Abusamra

Reviewed By: K. Nippani

M. Dupuis

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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.