

1) CONSTRUCTION:

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|-------------|---|------------------------|------------------------|
| CONDUCTOR: | 28 AWG 7/36 STRANDED TINNED COPPER | NOM. DIA. | .015" |
| INSULATION: | HIGH DENSITY POLYETHYLENE, .008" NOM. WALL THICKNESS | | .031" MIN. |
| | | | .0322" MAX. |
| PAIRS: | COLOR CODED SINGLES TWISTED INTO PAIRS | | .064" |
| CABLE: | (4) TWISTED PAIRS TWISTED TOGETHER TO FORM A CABLE CORE | | |
| SHIELD: | AN ALUMINUM POLYESTER ALUMINUM FOIL SHIELD (100% COVERAGE) SHALL BE APPLIED OVER THE CABLE CORE AND SHALL INCLUDE A 28 AWG STRANDED TINNED COPPER DRAIN WIRE IN CONTACT WITH THE OUTER SURFACE. | | .146" |
| JACKET: | POLYVINYLCHLORIDE, (COLOR, PER CHART 1), .020" NOM. WALL THICKNESS | OVERALL CABLE DIAMETER | .186" NOM .191" MAX |

2) PHYSICAL PROPERTIES:

| | |
|--------------------------|-----------|
| TEMPERATURE RATING, MAX. | 75°C |
| TEMPERATURE RATING, MIN. | -20°C |
| WT./M', NOM., NET. | 15.2 LBS. |

CHART 1:

| QUABBIN P/N | JACKET COLOR |
|-------------|--------------|
| 2231 | BLACK |
| 2232 | BROWN |
| 2233 | RED |
| 2234 | ORANGE |
| 2235 | YELLOW |
| 2236 | GREEN |
| 2237 | BLUE |
| 2238 | VIOLET |
| 2239 | GRAY |
| 2240 | WHITE |
| 2241 | BEIGE |
| 2242 | LIGHT BLUE |
| 2243 | PINK |
| 2244 | AQUA |
| 2245 | LIME |

3) ELECTRICAL CHARACTERISTICS:

SEE PAGE 2

4) AGENCY APPROVALS:

NEC (UL) TYPE CMR
CEC C(UL) TYPE CMR

5) APPLICATION:

RoHS COMPLIANT MATERIALS. MEETS TIA 568 C.2 CHANNEL REQUIREMENTS AT 56 METERS. 7.8 METERS OF PATCH CABLE WITH A 90 METERS PERMANENT LINK (97.8 METER CHANNEL) OR 10 METERS OF PATCH CABLE WITH AN 86 METER PERMANENT LINK (96 METER CHANNEL). SUPPORTS CAT 6A APPLICATIONS INCLUDING 10GBASE-T AT THESE LENGTHS. PATENT PENDING

6) PRINT: (WHITE INK ON BLACK JACKET, ALL OTHERS BLACK INK)
QUABBIN DATAMAX MINI-6a F/UTP PATCH CORD P/N (**QWC P/N PER CHART 1**) -- PATENT PENDING -- C(UL)US TYPE CMR 28 AWG 75C -- RoHS -- (**LOT DESIGNATOR**) (**SEQUENTIAL FOOTAGE**)

7) COLOR CODE:

1. WHITE/ORANGE X ORANGE
2. WHITE/BROWN X BROWN
3. WHITE/GREEN X GREEN
4. WHITE/BLUE X BLUE

8) PUT UPS

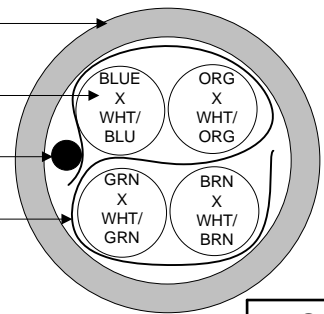
TO BE PACKAGED AS PER QWC'S STANDARD PACKAGING

JACKET

PAIR

DRAIN

SHIELD



PS1584

| | |
|---------------------|--------------------------|
| Created 01/28/15 | BMD DRAWN: 05/25/17 |
| REV. 08 | GBM CHECKED: 05/25/17 |



TITLE
DATAMAX MINI-6a 28 AWG CAT 6a F/UTP
PATCH CABLE – TYPE CMR

DRAWING# **QWC0085** 1 of 2

CUSTOMER APPROVAL:

DATE:

3) ELECTRICAL CHARACTERISTICS: (FOR 100m OF CABLE)

| | | | |
|-------------------------------|-------------------------------|---|--------------|
| CAPACITANCE, MUTUAL, NOM. | 13.5 PF/FT. AT 1 MHz | | |
| DIELECTRIC WITHSTANDING, MIN. | 1500V RMS | | |
| VOLTAGE RATING, MAX. | 300V | | |
| D.C. RESISTANCE, NOM. | 68.2 Ω /1000' | | |
| IMPEDANCE | 100 +/- 15 Ω 1-500 MHz | | |
| IMPEDANCE, SMOOTHED | 100 +/- 10 Ω TYPICAL | 5 - 500 MHz | |
| RETURN LOSS | 1 $\leq f < 2$ MHz | 17 + 9.5 LOG (f) dB MIN | |
| | 2 $\leq f < 10$ MHz | 20 + 5 LOG (f) dB MIN | |
| | 10 $\leq f < 20$ MHz | 25 dB MIN | |
| | 20 $\leq f \leq 500$ MHz | 25 - 8.6 LOG(f/20) dB MIN | |
| PS NEXT | 1 $\leq f \leq 500$ MHz | 42.3 - 15 LOG(f/100) dB MIN | |
| NEXT | 1 $\leq f \leq 500$ MHz | 44.3 - 15 LOG(f/100) dB MIN | |
| PSACRF | 1 $\leq f \leq 500$ MHz | 24.8 - 20 LOG(f/100) dB MIN | |
| ACRF | 1 $\leq f \leq 500$ MHz | 27.8 - 20 LOG(f/100) dB MIN | |
| INSERTION LOSS | 1 $\leq f \leq 500$ MHz | 1.95 [1.82 \sqrt{f} + 0.0091(f) + 0.25/ \sqrt{f}] dB MAX | |
| DELAY | 1 $\leq f \leq 500$ MHz | 534 + 36/ \sqrt{f} ns MAX | |
| DELAY SKEW | 1 $\leq f \leq 500$ MHz | <45ns MAX | |
| TCL | 1 $\leq f \leq 500$ MHz | 30-10LOG(f/100) dB MIN | |
| ELTCTL | 1 $\leq f \leq 30$ MHz | 35-20LOG(f) dB MIN | |
| PS ANEXT LOSS (6 AROUND 1) | 1 $\leq f \leq 500$ MHz | 62.5 - 15 LOG (F/100) dB MIN | 50 - 500 MHz |
| | | 67 dB MIN | 1 - 50 MHz |
| PSAACRF | 1-500 MHz | 38.2 - 20 LOG(F/100) dB MIN | |
| VELOCITY OF PROPAGATION | 68% | | |

NOTE: ALL TESTING IS CONDUCTED OFF THE REEL, USING 30m LENGTHS.

PS1584

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