

1) CONSTRUCTION:

CONDUCTOR: 28 AWG 7/36 STRANDED TINNED COPPER
 INSULATION: HIGH DENSITY POLYETHYLENE, .008" NOM. WALL THICKNESS

NOM. DIA.
 .015"
 .0325" MIN.
 .0331" MAX.
 .064"

PAIRS: COLOR CODED SINGLES TWISTED INTO PAIRS
 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
 (BY CALIPER)

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 568.2-D 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 NO. US 9,355,759 B2

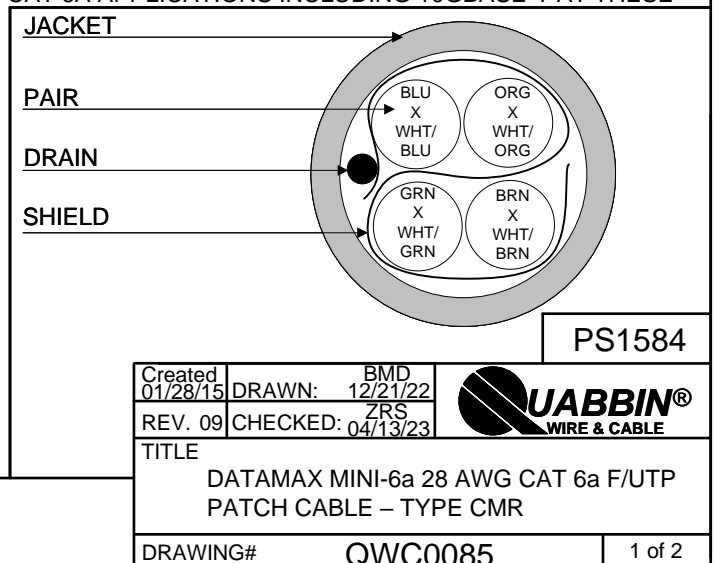
6) PRINT: (WHITE INK ON BLACK JACKET, ALL OTHERS BLACK INK)
 QUABBIN DATAMAX MINI-6a F/UTP PATCH CORD P/N (QWC P/N PER CHART 1) -- PATENT NO. US 9,355,759 B2 -- C(UL)US TYPE CMR 28 AWG 75C -- RoHS -- (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)

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



CUSTOMER APPROVAL:

DATE:


3) ELECTRICAL CHARACTERISTICS:

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'

NOTE: TESTING FOR THE FOLLOWING IS CONDUCTED OFF THE REEL, USING 50m LENGTHS. (FOR 100m OF CABLE)

IMPEDANCE	100 \pm 15 Ω 1 - 500 MHz								
IMPEDANCE, SMOOTHED	100 \pm 10 Ω TYPICAL 5 - 500 MHz								
RETURN LOSS	<table border="0"> <tr> <td>1 $\leq f <$ 2 MHz</td> <td>17 + 9.5 LOG (f) dB MIN</td> </tr> <tr> <td>2 $\leq f <$ 10 MHz</td> <td>20 + 5 LOG (f) dB MIN</td> </tr> <tr> <td>10 $\leq f <$ 20 MHz</td> <td>25 dB MIN</td> </tr> <tr> <td>20 $\leq f \leq$ 500 MHz</td> <td>25 - 8.6 LOG(f/20) dB MIN</td> </tr> </table>	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
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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 <45 ns								
TCL	1 $\leq f \leq$ 500 MHz 30 - 10 LOG(f/100) dB MIN								
ELTCTL	1 $\leq f \leq$ 30 MHz 35 - 20 LOG(f) dB MIN								
PS ANEXT LOSS (6 AROUND 1)	<table border="0"> <tr> <td>1 $\leq f \leq$ 500 MHz</td> <td>62.5 - 15 LOG (f/100) dB MIN</td> <td>50 - 500 MHz</td> </tr> <tr> <td></td> <td>67 dB MIN</td> <td>1 - 50 MHz</td> </tr> </table>	1 $\leq f \leq$ 500 MHz	62.5 - 15 LOG (f/100) dB MIN	50 - 500 MHz		67 dB MIN	1 - 50 MHz		
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	67 dB MIN	1 - 50 MHz							
PSAACRF	1 $\leq f \leq$ 500 MHz 38.2 - 20 LOG(f/100) dB MIN								
VELOCITY OF PROPAGATION	68%								

PS1584

Created 01/28/15	DRAWN: BMD 12/21/22	
REV. 09	CHECKED: ZRS 04/13/23	
TITLE DATAMAX MINI-6a 28 AWG CAT 6a F/UTP PATCH CABLE – TYPE CMR		
DRAWING#		QWC0085
		2 of 2

CUSTOMER APPROVAL: _____ DATE: _____