

1) CONSTRUCTION:

CONDUCTOR:	28 AWG 7/36 STRANDED TINNED COPPER	NOM. DIA.	.015"
INSULATION:	FOAMED FEP, .008" NOM. WALL THICKNESS		.031"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS		.062"
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.		.145"
JACKET:	LOW SMOKE POLYVINYLCHLORIDE, (COLOR, PER CHART 1), .021" NOM. WALL THICKNESS	OVERALL CABLE DIAMETER	.186" NOM. .191" MAX.

2) PHYSICAL PROPERTIES:

TEMPERATURE RATING, MAX.	105°C
TEMPERATURE RATING, MIN.	-20°C
WT./M', NOM., NET.	16.5 LBS.

CHART 1:

QUABBIN P/N	JACKET COLOR
2034	BLACK
2035	BROWN
2036	RED
2037	ORANGE
2038	YELLOW
2039	GREEN
2040	BLUE
2041	VIOLET
2042	GRAY
2043	WHITE
2044	STARLIGHT BEIGE

3) ELECTRICAL CHARACTERISTICS:

SEE PAGE 2

4) AGENCY APPROVALS:

NEC (ETL) TYPE CMP
CEC C(ETL) TYPE CMP

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 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(ETL)US TYPE CMP 28 AWG 105C -- RoHS -- (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)

7) COLOR CODE:

1. NATURAL X ORANGE
2. GRAY X BROWN
3. NATURAL X GREEN
4. GRAY X BLUE

8) PUT UPS

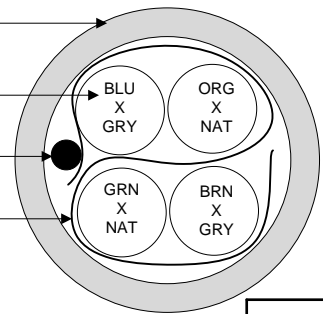
TO BE PACKAGED AS PER QWC'S STANDARD PACKAGING

JACKET

PAIR

DRAIN

SHIELD



Created 11/14/18	DRAWN: SGH 07/21/20
REV. 06	CHECKED: ZRS 07/21/20



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

DRAWING# QWC0114	1 of 2
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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.	22.4 Ω /100m (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	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	<45 ns MAX	
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)	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 $\leq f \leq 500$ MHz	38.2 - 20 LOG(f/100) dB MIN	
VELOCITY OF PROPAGATION	68%		

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