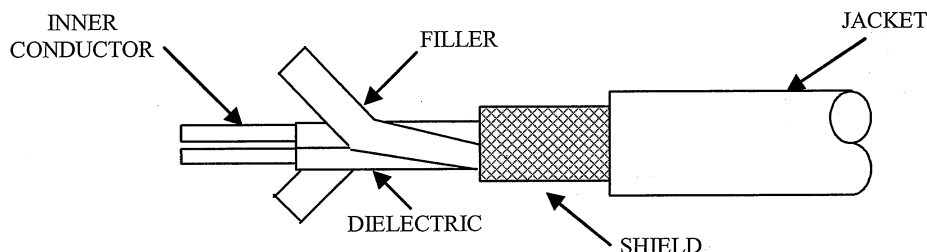


# TROMPETER SPECIFICATION SHEET

## CABLE, RADIO FREQUENCY, TWIN CONDUCTOR, BALANCED LINE

### TWC-78-1

RED INDICATES ORIGINAL



#### REQUIREMENTS:

1. IMPEDENCE (OF PAIR) -----  $78 \pm 3$  OHMS
  2. OPERATING VOLTAGE ----- 0.3 KVRMS MAX/0.6 KVDC MAX
  3. BEND RADIUS ----- 1.5 INCH MIN
  4. CAPACITANCE ----- COND TO COND ----- 20.3 PF/FT MAX  
COND TO SHIELD ----- 36.5 PF/FT
  5. CONDUCTOR LOOP RESISTANCE ----- 179 OHMS/M FT MAX
  6. VELOCITY OF PROPAGATION ----- 66% NOM
  7. ATTENUATION: FREQUENCY dB/100 FT NOM
- |        | dB/100 FT NOM | FREQUENCY | dB/100 FT NOM |
|--------|---------------|-----------|---------------|
| 1 MHz  | 2.00          | 40 MHz    | 10.60         |
| 3 MHz  | 3.00          | 50 MHz    | 11.90         |
| 4 MHz  | 3.50          | 100 MHz   | 16.80         |
| 5 MHz  | 4.00          | 200 MHz   | 23.70         |
| 7 MHz  | 4.50          | 500 MHz   | 37.50         |
| 10 MHz | 5.30          | 700 MHz   | 44.30         |
| 20 MHz | 7.50          | 1000 MHz  | 53.00         |
| 30 MHz | 9.20          |           |               |
8. WEIGHT ----- 15.7 LB/1000 FT
  9. OPERATING TEMPERATURE RANGE -----  $-40^{\circ}\text{C}$  TO  $+80^{\circ}\text{C}$
  10. MARK: TROMPETER ELECTRONICS TWINAX TWC-78-1 (\*)  
(\*) VENDOR I.D. CODE

| DESCRIPTION      | CONSTRUCTIONAL DETAILS                                                                                                                                                                                                       |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INNER CONDUCTORS | TWO CONDUCTORS, EACH 7 STRANDS OF AWG SIZE 33 TINNED COPPER WIRE PER ASTM-B-33. NOM DIA .022                                                                                                                                 |
| DIELECTRICS      | TWO EACH POLYETHYLENE PER L-P-390C, TYPE II, C1.H, 1 EA GR.3, NATURAL, 1 EA GR.2, BLUE. .043 $\pm$ .002 DIA TYP                                                                                                              |
| FILLERS          | TWO EACH POLYETHYLENE PER L-P-390C, TYPE II C1.L GR.3                                                                                                                                                                        |
| CABLE CORE       | .085 $\pm$ .003 O.D. DIELECTRICS AND FILLERS TO HAVE A RIGHT HAND OR LEFT HAND LAY, 8 TWISTS PER FOOT. AN OPTIONAL NYLON-THREAD WRAP MAY THEN BE APPLIED WITH SUFFICIENT COVERAGE TO MAINTAIN THE POSITION OF THE COMPONENTS |
| SHIELD           | SINGLE BRAID, AWG SIZE 36 TINNED COPPER WIRE SHIELD COVERAGE 93%. .108 NOM O.D.                                                                                                                                              |
| JACKET           | BLUE (PER EIA-359-A, MUNSELL COLOR CHART, SYMBOL CENTROID) POLYVINYLCHLORIDE .150 $\pm$ .005 O.D.                                                                                                                            |

|     |      |           |         |          |            |             |     |
|-----|------|-----------|---------|----------|------------|-------------|-----|
| TSI | DWN  | M JOHNSON | 3-12-08 | MATERIAL | CODE IDENT | DRAWING NO. | REV |
|     | CHK  | jm        | 6-26-08 |          |            |             |     |
|     | ENG  |           |         | SCALE    | DATE       | SHEET       | L   |
|     | APPR | jm        | 6-30-08 |          |            |             |     |
|     |      |           |         |          | 10-6-76    |             |     |

DATE 7-1-2008

APPR [Signature]

DWN MWJ

ECO 16590

REV L