

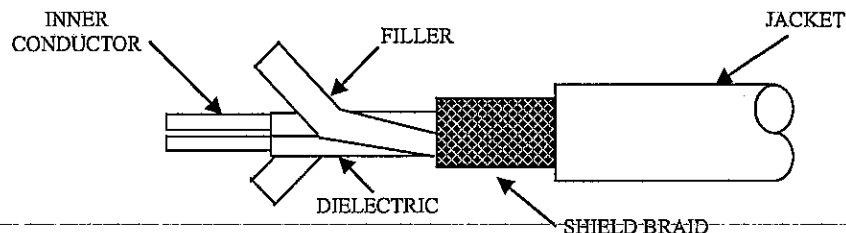
# TSI SPECIFICATION SHEET

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

TWC-124-1A

MARK: TROMPETER ELECTRONICS TWINAX, TWC-124-1A (\*)

(\*) VENDOR ID LETTER



### REQUIREMENTS:

1. IMPEDENCE (OF PAIR) -----  $124 \pm 5$  OHMS
2. OPERATING VOLTAGE ----- 0.3 KVRMS MAX/0.6 KVDC
3. BEND RADIUS ----- 1.5 INCH MIN
4. CAPACITANCE ----- 12.4 PF/FT
5. CONDUCTOR LOOP RESISTANCE ----- 570.6 OHMS/1000 FT MAX
6. VELOCITY OF PROPAGATION ----- 66% NOM
7. ATTENUATION:
 

| FREQUENCY | dB/100 FT NOM | FREQUENCY | dB/100 FT NOM |
|-----------|---------------|-----------|---------------|
| 1 MHz     | 3.25          | 40 MHz    | 11.80         |
| 3 MHz     | 4.40          | 50 MHz    | 13.20         |
| 4 MHz     | 4.80          | 100 MHz   | 18.70         |
| 5 MHz     | 5.20          | 200 MHz   | 26.40         |
| 7 MHz     | 5.60          | 500 MHz   | 41.70         |
| 10 MHz    | 5.90          | 700 MHz   | 49.40         |
| 20 MHz    | 8.30          | 1000 MHz  | 59.00         |
| 30 MHz    | 10.20         |           |               |
8. WEIGHT ----- 16.1 LB/1000 FT
9. OPERATING TEMPERATURE RANGE -----  $-40^{\circ}\text{C}$  TO  $+80^{\circ}\text{C}$

| DESCRIPTION      | CONSTRUCTIONAL DETAILS                                                                                                                                                                                              |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INNER CONDUCTORS | TWO CONDUCTORS, EACH 7 STRANDS OF AWG SIZE 38 TINNED COPPER WIRE. NOM DIA .012                                                                                                                                      |
| 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 .028 DIA NOM                                                                                                                                                  |
| CABLE CORE       | .085 $\pm$ .003 OD DIELECTRICS AND FILLERS TO HAVE A RIGHT HAND OR LEFT HAND LAY, 8 TWISTS PER FOOT. A NYLON-THREAD WRAP SHALL 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%. .105 O.D.                                                                                                                                         |
| JACKET           | BLUE (PER EIA-359-A, MUNSELL COLOR CHART, SYMBOL CENTROID) POLYVINYLCHLORIDE .150 $\pm$ .005 O.D.                                                                                                                   |

|     |      |                  |                 |          |            |             |     |
|-----|------|------------------|-----------------|----------|------------|-------------|-----|
| TSI | DWN  | DAR              | 10-17-00        | MATERIAL | CODE IDENT | DRAWING NO. | REV |
|     | CHK  | <i>D. Curran</i> | <i>11-24-04</i> |          |            |             |     |
|     | ENG  | <i>R. J. ...</i> | <i>11-24-04</i> | 14949    | TWC-124-1A | J           |     |
|     | APPR | <i>T. Cla...</i> | <i>11-24-04</i> | SCALE    | DATE       | SHEET       |     |
|     |      |                  |                 | 5-15-79  |            |             |     |

DATE 11/24/04

*M. Sch...*

APPR

DWN DAR

EO 13677

REV J

# Mouser Electronics

Authorized Distributor

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