

# Part Number: 8450



# Audio & Instrumentation, #22-1pr, TC, O/A Foil, CM

# **Product Description**

22 AWG solid tinned copper conductors, polypropylene insulation, twisted pair, overall Beldfoil® shield (100% coverage), 22 AWG solid TC drain wire, PVC jacket.

## **Technical Specifications**

## **Product Overview**

| Environmental Space:   |             |                    |                  |              |
|------------------------|-------------|--------------------|------------------|--------------|
| Physi                  | ical Char   | acteristics (Ove   | erall)           |              |
| Condu                  | ctor        |                    |                  |              |
| AWG                    | Stranding   | Material           | Nominal Diameter | No. of Pairs |
| 22                     | Solid       | TC - Tinned Copper | 0.02635 in       | 1            |
| Condu                  | ctor Count: |                    |                  |              |
| Total Number of Pairs: |             |                    |                  |              |
| Conductor Size:        |             |                    |                  |              |

#### Insulation

| Material           | Nominal Wall Thickness |  |  |
|--------------------|------------------------|--|--|
| PP - Polypropylene | 0.007 in               |  |  |

## **Color Chart**

| Number | Color       |  |
|--------|-------------|--|
| 1      | Black & Red |  |

#### Outer Shield Material

| Type | Material                     | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire Diameter | Drainwire AWG | Drainwire Construction n x D |
|------|------------------------------|---------------------|--------------|--------------------|--------------------|---------------|------------------------------|
| Таре | Aluminum Foil-Polyester Tape | Beldfoil® (Z-Fold®) | 100 %        | TC - Tinned Copper | 0.02635 mm         | 22            | Solid                        |

#### **Outer Jacket Material**

| Material                 | Nominal Diameter | Nominal Wall Thickness |
|--------------------------|------------------|------------------------|
| PVC - Polyvinyl Chloride | 0.118 in         | 0.018 in               |
|                          | 0.118 in         |                        |

#### **Electrical Characteristics**

## Conductor DCR

| Nominal Conductor DCR | Nominal Conductor DCR Conductor Resistance | Nominal Outer Shield DCR |
|-----------------------|--|--------------------------|
| 16.1 Ohm/1000ft       | 16.1 Ohm/1000ft                            | 12.65 Ohm/1000ft         |

# Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to | Shield     |
|---|--|------------|
| 40 pF/ft                                | 76 pF/ft   |            |
| Shielding:                              | Foile  | l(s) or Co |

#### Inductance

Nominal Inductance

#### Impedance

Nominal Characteristic Impedance
40 Ohm

## Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |  |  |  |
|---------------|--|--|--|--|
| 1.5 ns/ft     | 66 %                                     |  |  |  |

#### Current

Max. Recommended Current [A]
2.9 Amps per conductor @ 25°C

## Voltage

UL Voltage Rating 300 V RMS

# **Temperature Range**

| UL Temp Rating:       | 75°C            |
|-----------------------|-----------------|
| Operating Temp Range: | -20°C To +105°C |

# **Mechanical Characteristics**

| Bulk Cable Weight:               | 12 lbs/1000ft |  |
|----------------------------------|---------------|--|
| Max Recommended Pulling Tension: | 37 lbs        |  |
| Min Bend Radius/Minor Axis:      | 1.25 in       |  |

# **Standards**

| NEC/(UL) Specification:  | СМ  |
|--------------------------|-----|
| CEC/C(UL) Specification: | CM  |
| CPR Euroclass:           | Eca |

# **Applicable Environmental and Other Programs**

| EU Directive 2000/53/EC (ELV):        | Yes                           |
|---------------------------------------|-------------------------------|
| EU Directive 2003/11/EC (BFR):        | Yes                           |
| EU Directive 2011/65/EU (ROHS II):    | Yes                           |
| EU Directive 2012/19/EU (WEEE):       | Yes                           |
| EU Directive 2015/863/EU:             | Yes                           |
| EU Directive Compliance:              | EU Directive 2003/11/EC (BFR) |
| EU CE Mark:                           | Yes                           |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2004-01-01                    |
| CA Prop 65 (CJ for Wire & Cable):     | Yes                           |
| MII Order #39 (China RoHS):           | Yes                           |

# Flammability, LS0H, Toxicity Testing

| UL Flammability:   | UL1685 UL Loading |
|--------------------|-------------------|
| UL Voltage Rating: | 300V RMS          |

# Plenum/Non-Plenum

| Plenum (Y/N): | No |  |
|---------------|----|--|

## **Part Number**

#### Variants

| Item #        | Color |
|---------------|-------|
| 8450 0101000  | BLACK |
| 8450 010U1000 | BLACK |
| 8450 010U500  | BLACK |
| 8450 0081000  | GRAY  |

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