

Part Number: 9729

RS-232/422 Low Cap, #24-2pr, FPO, Individ. Foil, PVC Jkt, CM, 100Ω



Product Description

Computer EIA RS-232/422, Digital Audio Cable, 24 AWG stranded (7x32) tinned copper conductors, Datalene® insulation, twisted pairs, individually Beldfoil® shielded (100% coverage), 24 AWG stranded tinned copper drain wire, PVC jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | Nominal Diameter | No. of Conductors | No. of Pairs |
|-----|-----------|--------------------|------------------|-------------------|--------------|
| 24 | 7x32 | TC - Tinned Copper | 0.024 in | 4 | 2 |

| | |
|------------------|--------|
| Conductor Count: | 4 |
| Conductor Size: | 24 AWG |

Insulation

| Material | Material Trade Name | Nominal Wall Thickness |
|---------------------------|---------------------|------------------------|
| FPE - Foamed Polyethylene | Datalene® | 0.019 in |

Color Chart

| Number | Color |
|--------|---------------|
| 1 | Black & Red |
| 2 | Black & White |

Color Chart 2

| Number |
|--------|
| 16 |

Inner Shield Material

| Type | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|------|------------------------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | Aluminum Foil-Polyester Tape | Beldfoil® (Z-Fold®) | 100 % | TC - Tinned Copper | 24 | 7x32 mm |

Outer Jacket Material

| Material | Nominal Diameter | Nominal Wall Thickness |
|--------------------------|------------------|------------------------|
| PVC - Polyvinyl Chloride | 0.266 in | 0.048 in |

Construction and Dimensions

Stranding

| Lay Direction | Twists |
|---------------|--------------|
| Left Hand | 6.9 twist/ft |

Electrical Characteristics

Conductor DCR

| Individual Pair Nominal Shield DCR | Nominal Conductor DCR |
|------------------------------------|-----------------------|
| 15 Ohm/1000ft | 24 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| 12.5 pF/ft | 23.2 pF/ft |

| | |
|------------|----------------------------------|
| Shielding: | Individually Foiled + No Overall |
|------------|----------------------------------|

Inductance

| |
|---------------------------|
| Nominal Inductance |
| 0.23 μ H/ft |

Impedance

| |
|---|
| Nominal Characteristic Impedance |
| 100 Ohm |

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 0.384 MHz | 0.74 dB/100m |
| 0.7056 MHz | 0.87 dB/100m |
| 0.768 MHz | 0.88 dB/100m |
| 1.024 MHz | 0.94 dB/100m |
| 1.4112 MHz | 1.01 dB/100m |
| 1.536 MHz | 1.03 dB/100m |
| 2.048 MHz | 1.13 dB/100m |
| 2.8224 MHz | 1.29 dB/100m |
| 3.072 MHz | 1.35 dB/100m |
| 4.096 MHz | 1.57 dB/100m |
| 5.6448 MHz | 1.78 dB/100m |
| 6.144 MHz | 1.84 dB/100m |
| 8.192 MHz | 2.13 dB/100m |
| 11.2896 MHz | 2.45 dB/100ft |
| 12.288 MHz | 2.57 dB/100ft |
| 24.576 MHz | 3.57 dB/100ft |

Delay

| Max. Delay Skew | Nominal Velocity of Propagation (VP) [%] |
|-----------------|--|
| 76 ns/100m | 76 % |

High Freq

| Frequency [MHz] |
|-----------------|
| 0.384 MHz |
| 0.7056 MHz |
| 0.768 MHz |
| 1.024 MHz |
| 1.4112 MHz |
| 1.536 MHz |
| 2.048 MHz |
| 2.8224 MHz |
| 3.072 MHz |
| 4.096 MHz |
| 5.6448 MHz |
| 6.144 MHz |
| 8.192 MHz |
| 11.2896 MHz |
| 12.288 MHz |
| 24.576 MHz |

Current

| |
|-------------------------------------|
| Max. Recommended Current [A] |
| Per conductor @ 25°C: 1 A |

| | |
|---------------------|----------------------|
| Current Table Note: | 10C Temperature Rise |
|---------------------|----------------------|

Voltage

| |
|--------------------------|
| UL Voltage Rating |
| 300 V RMS |

| | |
|-----------------------------------|---|
| Electrical Characteristics Notes: | Attenuation @ 1 MHz: 0.94 dB/100 ft nom |
|-----------------------------------|---|

Temperature Range

| | |
|-----------------------|--------------------------|
| UL Temp Rating: | 80°C (UL AWM Style 2919) |
| Operating Temp Range: | -20°C To +80°C |

Mechanical Characteristics

| | |
|----------------------------------|---------------|
| Bulk Cable Weight: | 35 lbs/1000ft |
| Max Recommended Pulling Tension: | 22 lbs |
| Min Bend Radius/Minor Axis: | 2.75 in |

Standards

| | |
|--------------------------|------------------|
| NEC Articles: | 800 |
| NEC/(UL) Specification: | CM |
| CEC/C(UL) Specification: | CM |
| UL AWM Style: | 2919 (30 V 80°C) |
| CPR Euroclass: | Eca |

Applicable Environmental and Other Programs

| | |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/96/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 |

Suitability

| | |
|------------------------------------|-----|
| Suitability - Hazardous Locations: | Yes |
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | No |

Flammability, LSOH, Toxicity Testing

| | |
|--------------------|---------------------|
| UL Flammability: | UL1685 (UL Loading) |
| CSA Flammability: | FT1 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

| | |
|----------------|--------------|
| Plenum (Y/N): | No |
| Plenum Number: | 89729, 82729 |

Part Number

Variants

| Item # | Color | Footnote |
|---------------|--------|----------|
| 9729.001100 | Chrome | |
| 9729.002000 | Chrome | |
| 9729.0030 | Chrome | |
| 9729.00305 | Chrome | |
| 9729.00500 | Chrome | |
| 9729.01152 | Chrome | |
| 9729 060100 | Chrome | |
| 9729 0601000 | Chrome | C |
| 9729 06010000 | Chrome | C Y |
| 9729 060500 | Chrome | C |
| 9729 0605000 | Chrome | C |

| | |
|-----------|---|
| Footnote: | C - CRATE REEL PUT-UP. |
| Footnote: | Y - FINAL PUT-UP LENGTH MAY VAR -10% TO +20% FROM LENGTH SHOWN. MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'. |

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