# **Detailed Specifications & Technical Data**

### **ENGLISH MEASUREMENT VERSION**



# 1673J Coax - 50 Ohm Microwave Cable

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For more Information please call

1-800-Belden1



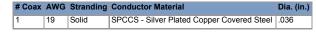
# **General Description:**

RG-402/U type, 19 AWG solid .036" silver-plated copper-covered steel conductor, TFE Teflon® Insulation, copper-tin composite shield (100% coverage), PVC jacket.

# **Physical Characteristics (Overall)**

# Conductor

AWG:



Total Number of Conductors:

#### Insulation

### Insulation Material:

| 1 | Insulation Trade Name | Insulation Material       | Dia. (in.) |
|---|-----------------------|---------------------------|------------|
|   | Teflon®               | TFE - Tetrafluoroethylene | .116       |

### **Outer Shield**

Outer Shield Material:

| Layer # | Type  | Outer Shield Material | Coverage (%) |
|---------|-------|-----------------------|--------------|
| 1       | Tape  | Copper Foil           | 100          |
| 2       | Braid | Tin-Filled Composite  | 100          |

### **Outer Jacket**

### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

# **Overall Cable**

Overall Nominal Diameter: 0.178 in.

# Mechanical Characteristics (Overall)

| Operating Temperature Range:      | -40°C To +105°C |
|-----------------------------------|-----------------|
| UL Temperature Rating:            | 105°C           |
| Non-UL Temperature Rating:        | 105°C           |
| Bulk Cable Weight:                | 32 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 70 lbs.         |
| Min. Bend/Installation:           | 0.250 in.       |
| Min. Flexing Radius:              | 0.750 in.       |

# **Applicable Specifications and Agency Compliance (Overall)**

### **Applicable Standards & Environmental Programs**

| UL Style 10245 |
|----------------|
| Yes            |
| No             |
| Yes            |
| Yes            |
| 01/01/2005     |
| Yes            |
| Yes            |
| Yes            |
| Yes            |
| 402/U          |
|                |

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| Flame Test             |                 |
|------------------------|-----------------|
| Other Flame Test:      | Horizontal Wire |
| Suitability            |                 |
| Suitability - Indoor:  | Yes             |
| Suitability - Outdoor: | Yes             |
| Plenum/Non-Plenum      |                 |
| Plenum (Y/N):          | No              |
|                        |                 |

### **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

| Impedance (Ohm) |
|-----------------|
| 50              |

Nom. Inductance:



Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:

| DCR @ 20°C (Ohm/1000 ft) |  |
|--------------------------|--|
| 20.5                     |  |

Nominal Outer Shield DC Resistance:

| DCR @ 20°C (Ohm/1000 ft) |
|--------------------------|
| 4.5                      |

Maximum VSWR:

| Description               | Freq. (MHz) | Max. VSWR |
|---------------------------|-------------|-----------|
| Ramp Function, End Points | 500         | 1.1       |
|                           | 20000       | 1.3       |

# Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| 500         | 8.0                      |
| 1000        | 12.0                     |
| 2000        | 18.1                     |
| 3000        | 22.9                     |
| 5000        | 31.0                     |
| 7000        | 37.8                     |
| 10000       | 46.6                     |
| 15000       | 59.1                     |
| 18000       | 65.8                     |
| 20000       | 70.0                     |

### Max. Attenuation:

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| 500         | 9.5                      |
| 1000        | 14.5                     |
| 3000        | 26.5                     |
| 5000        | 36.0                     |
| 10000       | 54.0                     |
| 20000       | 84.0                     |

# Nom. Power Rating:

|             | -          |
|-------------|------------|
| Freq. (MHz) | Rating (W) |
| 500         | 600        |
| 1000        | 401        |
| 2000        | 268        |
| 3000        | 211        |
| 5000        | 157        |
| 7000        | 129        |

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# **Detailed Specifications & Technical Data**

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| 10000 | 105 | 1 |
|-------|-----|---|
| 15000 | 83  | 1 |
| 18000 | 74  | 1 |
| 20000 | 70  | 1 |

Max. Operating Voltage - UL:

Voltage 30 V RMS

Max. Operating Voltage - Non-UL:

Voltage 1900 V RMS

# Misc. Information (Overall)

### Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

### **Put Ups and Colors:**

| Item #       | Putup  | Ship Weight | Color | Notes | Item Desc                   |
|--------------|--------|-------------|-------|-------|-----------------------------|
| 1673J 010100 | 100 FT | 5.100 LB    | BLACK | С     | #19 TFE BRD TINNED COAX PVC |
| 1673J 010500 | 500 FT | 16.500 LB   | BLACK | CV    | #19 TFE BRD TINNED COAX PVC |

#### Notes:

C = CRATE REEL PUT-UP

V = 250' PUT-UP EXACT LENGTH MAXIMUM OF 3 PIECESMINIMUM LENGTH 50'500' PUT-UP EXACT LENGTH MAXIMUM OF 5 PIECESMINIMUM LENGTH 50'

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