



## 7809A

Part Number: 7809A

Intermediate Type

### Product Description

Intermediate type, 13 AWG solid .072" bare copper conductor, gas-injected foam HDPE insulation, Duobond® II & #43; tinned copper braid shield (95% coverage), polyethylene jacket.

### Product Specifications

#### Conductor

Total Number of Conductors:

1

### Technical Specifications

#### APAC Standard

Mil Order #39 (China RoHS):

Yes

#### Bend Radius

Min Bend Radius/Minor Axis:

3 in

#### CCB-Part Number

Notes:

100% Sweep Tested. 6 GHz. Belden® The Wire in Wireless®

#### CCB-Sub-Part Number

Plenum (Y/N):

No

#### Connectors

Suggested Connectors:

Mates with Land Mobile Radio type connectors.

## Contact Information

PHONE_NUM:	1-800-Belden1
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## EMEA Standard

EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
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## Environmental Characteristics

Operating Temp Range:	-40°C To +75°C
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## EU Directive

EU CE Mark:	No
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EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
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## General Electrical Parameters

Sweep Testing:	100% Sweep tested to 6 GHz.
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## North American Standard

CA Prop 65 (CJ for Wire & Cable):	Yes
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Series Type:	RF 300
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## Temperature Range

Non-UL Temp Rating:	80°C
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## Use

Max Recommended Pulling Tension:	135 lbs
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### Impedance:

#### Nominal Characteristic Impedance

50 Ohm
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### Inductance:

#### Nominal Inductance

0.06 $\mu$ H/ft
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**Conductor DCR:**

Nominal Conductor DCR	Nominal Outer Shield DCR
2.1 Ohm/1000ft	2.4 Ohm/1000ft

**Power Rating:**

Frequency [MHz]	Nominal Power Rating [W]
30 MHz	2,161 W
50 MHz	1,658 W
150 MHz	928 W
220 MHz	758 W
450 MHz	522 W
900 MHz	367 W
1,500 MHz	278 W
1,800 MHz	253 W
2,000 MHz	239 W
2,500 MHz	212 W
3,000 MHz	194 W
3,500 MHz	179 W
4,500 MHz	157 W
5,800 MHz	137 W
6,000 MHz	135 W

**Delay:**

Nominal Delay	Nominal Velocity of Propagation (VP)
1.17 ns/ft	86 %

**Voltage:**

Non-UL Voltage Rating
300V RMS

**VSWR:**

Frequency [MHz]	Max. VSWR
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	1.25:1
5 MHz	
6000 MHz	

**Capacitance:**

Nominal Capacitance Conductor to Shield	
23 pF/ft	

**High Frequency (Nominal/Typical):**

Frequency (MHz)	Nom. Insertion Loss
5 MHz	0.45 db/100ft
10 MHz	0.6 db/100ft
30 MHz	1 db/100ft
50 MHz	1.3 db/100ft
150 MHz	2.2 db/100ft
220 MHz	2.7 db/100ft
450 MHz	3.9 db/100ft
900 MHz	5.6 db/100ft
1500 MHz	7.3 db/100ft
1800 MHz	8.1 db/100ft
2000 MHz	8.6 db/100ft
2500 MHz	9.7 db/100ft
3000 MHz	10.8 db/100ft
3500 MHz	11.8 db/100ft
4500 MHz	13.5 db/100ft
5800 MHz	15.8 db/100ft
6000 MHz	16 db/100ft

**Insulation:**

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.19 in

## Outerjacket 1:

Material	Nominal Diameter
PE - Polyethylene	0.3 in

## Conductor:

AWG	Stranding	Material	Nominal Diameter	No. of Coax
13	Solid	BC - Bare Copper	0.072 in	1

## Outershield 1:

Type	Layer	Material	Material Trade Name	Coverage
Tape	1	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	Bonded Duofoil®	100 %
Braid	2	TC - Tinned Copper		95 %

## Product Variants

Part Number	Color	Put-Up Type	Length
7809A 0101000	BLACK	Reel	1000 ft
7809A 010500	BLACK	Reel	500 ft

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