

Product: 7809A ☑





# **Product Description**

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

## **Technical Specifications**

## **Physical Characteristics (Overall)**

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

#### Insulation

Conductor

## Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	95%
Braid	2	Tinned Copper (TC)		95%

# Outer Jacket Material

Material	Nominal Diameter
PE - Polyethylene	0.3 in

### **Electrical Characteristics**

## Conductor DCR

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

## Capacitance

Nom. Capacitance Conductor to Shield 23 pF/ft

#### Inductance

Nominal Inductance

## Impedance

Nominal Characteristic Impedance
50 Ohm

## 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 MH	z	2.2 dB/100ft
220 MH	z	2.7 dB/100ft
450 MH	z	3.9 dB/100ft
900 MH	z	5.6 dB/100ft
1500 MH	Нz	7.3 dB/100ft
1800 MH	Ηz	8.1 dB/100ft
2000 MH	Ηz	8.6 dB/100ft
2500 MH	Ηz	9.7 dB/100ft
3000 MH	Ηz	10.8 dB/100ft
3500 MH	Ηz	11.8 dB/100ft
4500 MH	Ηz	13.5 dB/100ft
5800 MH	Ηz	15.8 dB/100ft
6000 MH	Ηz	16 dB/100ft

## Delay

Nominal Delay 1.17 ns/ft

## Power Rating

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

## Voltage

Non-UL Voltage Rating 300 V RMS

### VSWR

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

# **Temperature Range**

Non-UL Temp Rating:	80°C
Operating Temp Range:	-40°C To +75°C

# **Mechanical Characteristics**

Bulk Cable Weight:	54 lbs/1000ft
Max. Pull Tension:	135 lbs
Min Bend Radius/Minor Axis:	3 in

## **Standards**

RG Type: N/A

# **Applicable Environmental and Other Programs**

Environmental Space:	Indoor (Not Riser or Plenum)

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:	No
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
MII Order #39 (China RoHS):	Yes

### **Suitability**

Suitability - Indoor:	Yes		

### Plenum/Non-Plenum

Plenum (Y/N):	No		

#### **Part Number**

#### **Variants**

Item #	Color	Putup Type	Length	UPC
7809A 010500	Black	Reel	500 ft	612825189749
7809A 0101000	Black	Reel	1,000 ft	612825189732

Footnote: C - CRATE REEL PUT-UP.

## **History**

Update and Revision:	Revision Number: 0.274 Revision Date: 08-25-2020			

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