

82509 Multi-Conductor - Computer Cable for EIA RS-232 Applications



Description:

24 AWG stranded (7x32) tinned copper conductors, plenum, FEP insulation, twisted pair, overall Beldfoil shield (100% coverage), 24 AWG stranded TC drain wire, Flammarrest® jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
9	24	7x32	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
FEP - Fluorinated Ethylene Propylene	.006

Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire	Conductor Material
24	7x32	TC - Tinned Copper	

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material	Nom. Wall Thickness (in.)
Flammarrest®	LS PVC - Low Smoke Polyvinyl Chloride	.015

Overall Cabling

Overall Nominal Diameter: 0.246 in.

Pair

Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown
7	Black & Orange
8	Red & White
9	Red & Green

Pair Lay Length & Direction:

Lay Length (in.)
2.500

Mechanical Characteristics (Overall)

Operating Temperature Range: 0°C To +75°C

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Bulk Cable Weight:	45.900 lbs/1000 ft.
Max. Recommended Pulling Tension:	110 lbs.
Min. Bend Radius (Install)/Minor Axis:	2.500 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	10/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Flame Test

UL Flame Test:	NFPA 262
C(UL) Flame Test:	FT6

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Electrical Characteristics (Overall)

Nom. Inductance:

Inductance (µH/ft)
.17

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
23

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
42

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
24.1

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
15

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Recommended Current:

Current
1.5 Amps per conductor @ 25°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
82509 8771000	1,000 FT	49.000 LB	NATURAL	C	9 PR #24 FEP FS FLRST

Notes:

C = CRATE REEL PUT-UP.

Overall Beldfoil® Shield


Computer Cables for EIA RS-232 Applications

Plenum-Rated


Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Insulation Thickness		Jacket Thickness		Nominal OD		Nominal Capacitance			
					Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm	* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

24 AWG Stranded (7x32) TC Conductors • Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG Stranded TC Drain Wire

Plenum • FEP Insulation • Natural Flamarrest® Jacket

	300V RMS	82641	NEC: CMP CEC: CMP FT6	1	See Chart 3 (Tech Info Section)	U-1000† 1000†	U-304.8 304.8	9.0 8.0	4.1 3.6	.006 .15	.15 .014	.36 .36	.106 2.69	31	102	59	194
		82502	NEC: CMP CEC: CMP FT6	2	See Chart 3 (Tech Info Section)	U-500† U-1000†	U-152.4 U-304.8	8.0 16.0	3.6 7.3	.006 .15	.15 .014	.36 .36	.162 4.11	25	82	45	148
		82503	NEC: CMP CEC: CMP FT6	3	See Chart 3 (Tech Info Section)	U-1000† 1000†	U-304.8 304.8	19.0 18.0	8.6 8.2	.006 .15	.15 .014	.36 .36	.169 4.29	25	82	45	148
		82504	NEC: CMP CEC: CMP FT6	4	See Chart 3 (Tech Info Section)	U-1000† 1000†	U-304.8 304.8	24.0 26.0	10.9 11.8	.006 .15	.15 .014	.36 .36	.193 4.90	25	82	45	148
		82505	NEC: CMP CEC: CMP FT6	5	See Chart 3 (Tech Info Section)	U-1000† 1000†	U-304.8 304.8	29.0 31.0	13.2 14.0	.006 .15	.15 .015	.38 .38	.196 4.98	25	82	45	148
		82506	NEC: CMP CEC: CMP FT6	6	See Chart 3 (Tech Info Section)	U-500† U-1000†	U-152.4 U-304.8	17.5 34.0	8.0 15.5	.006 .15	.15 .015	.38 .38	.209 5.31	25	82	45	148
		82509	NEC: CMP CEC: CMP FT6	9	See Chart 3 (Tech Info Section)	1000†	304.8	49.0 22.3	.006 .15	.15 .015	.38 .38	.246 6.25	23	75	42	138	

Plenum • FEP Insulation • Red FEP Jacket

	300V RMS	88641	NEC: CMP CEC: CMP FT6	1	See Chart 3 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	2.4 6.0 9.0	1.1 2.7 4.1	.006 .15	.15 .014	.36 .36	.106 2.69	31	102	59	194
		89503	NEC: CMP CEC: CMP FT6	3	See Chart 3 (Tech Info Section)	100 500† 1000†	30.5 152.4 304.8	4.0 10.5 21.0	1.8 4.8 9.5	.006 .15	.15 .014	.36 .36	.175 4.45	21	69	40	131
		89504	NEC: CMP CEC: CMP FT6	4	See Chart 3 (Tech Info Section)	500† 1000†	152.4 304.8	13.0 29.0	6.0 13.1	.006 .15	.15 .014	.36 .36	.192 4.88	21	69	40	131
		89505	NEC: CMP CEC: CMP FT6	5	See Chart 3 (Tech Info Section)	100 1000†	30.5 304.8	4.9 33.0	2.2 15.0	.006 .15	.15 .014	.36 .36	.197 5.00	21	69	40	131

TC = Tinned Copper

* Capacitance between conductors.

** Capacitance between one conductor and other conductors connected to shield.

† Spools and/or UnReel® cartons are one piece, but length may vary ±10% for spools and ±5% for UnReel from length shown.