

**PLENUM COPPER FUSION™ SERIAL DIGITAL™**  
18 AWG 1C Solid BC

12/13/06 Rev. 1.1



**PART NUMBER:** 181SDM

**DESCRIPTION:** *RG6/U 18 AWG 1 CONDUCTOR SOLID BARE COPPER, FOAM FEP DIELECTRIC, CLEAR TINTED LOW SMOKE PVC JACKET, 100% BONDED ALUMINUM FOIL TAPE, 95% TINNED COPPER BRAID, SWEPT TO 2.4GHz, UL/NEC, C(UL)/CEC: CMP*

**PHYSICAL CHARACTERISTICS:**

**TEMPERATURE RATING:** -30 TO +75 DEG. C  
**CONDUCTOR MATERIAL & DIA.:** 18 AWG SOLID BARE COPPER, .040"  
**INSULATION MATERIAL & DIA.:** FOAM FEP, .18" NOM  
**SHIELD TYPE & % COVERAGE:** AL FOIL SHIELD TAPE, 100%  
 TINNED COPPER BRAID, 95%  
**JACKET MATERIAL & THICKNESS:** CLEAR TINTED PVC, .035" NOM  
**JACKET COLOR:** LIGHT BLUE  
**OUTSIDE DIAMETER:** .274" NOM.  
**FOOTAGE MARKERS:** ASCENDING/DESCENDING IN FEET  
**PACKAGING:** REELS  
**SHIPPING WEIGHT:** 44 LBS.

**ELECTRICAL CHARACTERISTICS:**

**MAX. OPERATING VOLTAGE:** 300V  
**IMPEDANCE:** 75 OHMS  
**NOM. INDUCTANCE:** .106 UH/FT  
**NOM. CAPACITANCE CONDUCTOR TO SHIELD:** 16.2 pf/FT  
**NOM. VELOCITY OF PROPAGATION:** 82%  
**NOM. DELAY:** 1.24 ns/FT  
**NOM. CONDUCTOR DC RESISTANCE @ 20 DEG.C:** 6.04 OHMS/1000 FT.  
**NOM. SHIELD DC RESISTANCE @ 20 DEG. C:** 2.8 OHMS/1000 FT.  
**RETURN LOSS:** 23db MIN, 5 - 850 MHz  
 21db MIN, 851MHz - 2.4 GHz  
**NOM. ATTENUATION:**

<u>MHZ</u>	<u>DB/100 FT.</u>	<u>MHZ</u>	<u>DB/100 FT.</u>
1	0.24	180	2.42
3.58	0.45	270	2.97
5	0.54	360	3.43
7	0.63	540	4.25
10	0.72	720	4.95
67.5	1.57	750	5.00
71.5	1.6	1000	5.89
88.5	1.75	1500	7.33
100	1.84	2000	8.57
135	2.1	2250	9.14
143	2.16	3000	10.67

**NOTES:**

- Footage markers printed every two feet.
- Foil shield is bonded to the dielectric.
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**UL CRITERIA:**

**UL TYPE OR STYLE:** UL/NEC, C(UL)/CEC: CMP  
**FLAME RESISTANCE:** 1581 VERTICAL TRAY