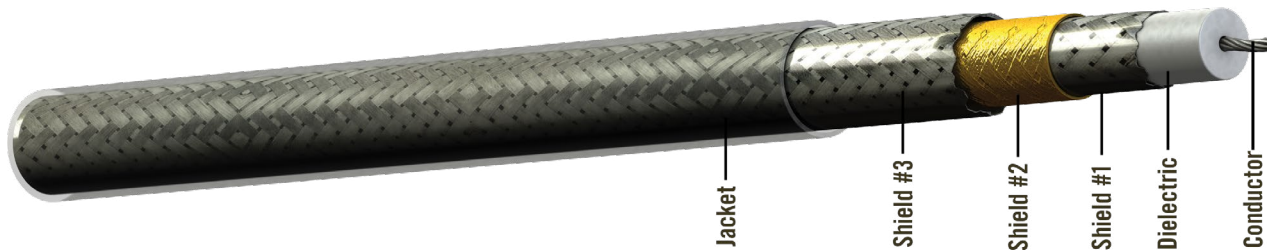


S33141



CABLE CONSTRUCTION

Conductor: Silver-Plated Copper

Dielectric: PTFE

Shield #1: Silver-Plated Copper Flat Strip Braid

Shield #2: Aluminum/Polyimide Foil

Shield #3: Silver-Plated Copper Braid

Jacket: Extruded FEP, Clear

S33141 is a 50 Ohm coaxial cable and the industry's workhorse, with decades of proven performance in the aerospace and defense markets. The construction of the S33141 features a multi-layered shielding that combines conventional shields with an inner braid woven of flat strip of silver plated copper which reduces attenuation at frequencies over 1GHz when compared to round wire braids in standard coaxial cable. The cable VSWR is lower because the braids can be applied more uniformly, providing more uniform coverage and reducing attenuation due to aging and flexure. When compared to Mil-Spec coax cable, the S33141 cable is less than one third the weight of RG393 coax cable and approximately half the weight when compared to RG393, as well as more flexible and lower loss.

PHYSICAL DATA

Conductor: 14 AWG Stranded SPC
Temperature Range: -55 to +200°C
Outer Diameter: in (mm) 0.27 (6.86)
Minimum Bend Radius: in (mm) 1.4 (35.56)
Weight: lbs/100 ft (kg/100 m) 6.5 (9.7)

ELECTRICAL DATA

Impedance: 50 ohms
Capacitance: pF/ft (m) 25.0 (82.0)
Velocity of Propagation: 80.5%
Time Delay: ns/ft (m) 1.26 (4.13)
Shielding Effectiveness: dB/min -90
DC Resistance: ohms/1000 ft (m) 2.9 (9.5)

ENVIRONMENTAL DATA

Skydrol Resistant: SAE AS4373E, Method 601
RoHS Compliant: RoHS Directive 2002/95/EC)
Flame / Smoke Requirements: FAR Part 25.869 (a) App. F, Part 1, (a)(3)
Berry Specialty Metals Compliance: DFARS 252.225-7014, Alt 1

ATTENUATION DATA

| Frequency | Nom / Max dB/100 ft | Nom / Max (dB/100 m) |
|-----------|---------------------|----------------------|
| @0.4 GHz | 4.2/4.7 | (13.8/15.4) |
| @1.0 GHz | 6.7/7.4 | (22.0/24.3) |
| @1.6 GHz | 8.6/9.5 | (28.2/31.2) |
| @5.0 GHz | 15.5/17.1 | (50.9/56.1) |

Formula for Attenuation:
 $(K1 \times \sqrt{F(\text{MHz})}) + (K2 \times F(\text{MHz}))$

K Values (nom loss):
 K1 = 0.207 K2 = 0.0001785

All values nominal, unless otherwise noted

S33141 50 OHM COAXIAL CABLE

CONTACTS/CONNECTORS FOR S33141

ARINC CONTACTS

| PART # | CONTACT TYPE |
|--------|----------------------------|
| 190319 | 404 Size 1 Socket |
| 190301 | 600 Size 1 Socket |
| 190302 | 600 Modified Size 1 Socket |
| 190303 | 404/600 Size 5 Socket |
| 190329 | Size 8 Socket |

M39029 for MIL-C-38999 Connector

| PART # | CONTACT TYPE |
|--------|---------------|
| 190338 | Size 8 Pin |
| 190339 | Size 8 Socket |

M39012 CONNECTORS

| PART # | CONNECTOR TYPE |
|--------|-------------------|
| 190312 | BNC Straight Plug |
| 190313 | BNC 90° Plug |
| 190327 | BNC Inline Jack |
| 190306 | C Straight Plug |
| 190307 | C 90° Plug |
| 190304 | HN Straight Plug |
| 190305 | HN 90° Plug |
| 190310 | N Straight Plug |
| 190311 | N 90° Plug |
| 190324 | N Inline Jack |
| 190322 | N Bulkhead Jack |
| 190314 | SMA Straight Plug |
| 190315 | SMA 90° Plug |
| 190308 | TNC Straight Plug |
| 190309 | TNC 90° Plug |
| 190331 | TNC 75° Plug |
| 190323 | TNC Inline Jack |
| 190321 | TNC Bulkhead Jack |