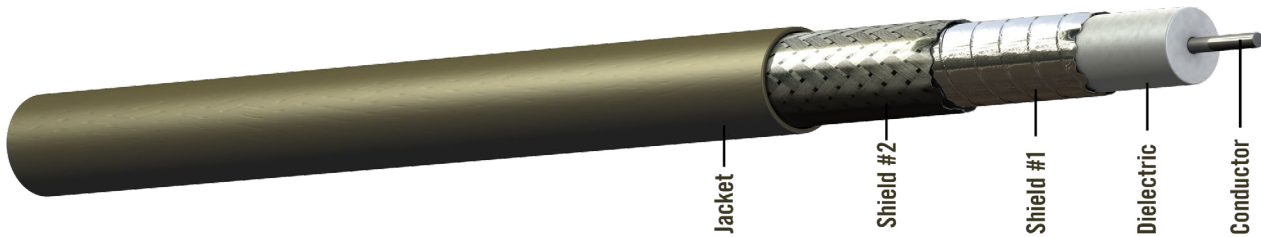


# HH85295F



## CABLE CONSTRUCTION

**Conductor:** Silver-Plated Copper

**Dielectric:** PTFE

**Shield #1:** Silver-Plated Copper Flat Spiral

**Shield #2:** Silver-Plated Copper Braid

**Jacket:** Extruded ETFE, Olive Drab

HH85295F is a 50-Ohm microwave coaxial cable designed for high-frequency applications on the Ku band and X band. HH85295F provides superior signal integrity, low insertion loss, less RF interference, and a robust yet easy-to-install design. The HH85295F coaxial cable is a 100% shielded construction, incorporating a flat spiral-wrapped shield that achieves -110 dB shielding effectiveness, the same as a solid copper tube. The inner spiral shield conforms to the low-loss PTFE dielectric for superior uniformity and stability of all operation parameters, initially and over time.

## PHYSICAL DATA

|                                      |                  |
|--------------------------------------|------------------|
| <b>Conductor:</b>                    | 11 AWG Solid SPC |
| <b>Temperature Range:</b>            | -55 to +200°C    |
| <b>Outer Diameter:</b> in (mm)       | 0.291 (7.39)     |
| <b>Minimum Bend Radius:</b> in (mm)  | 1.5 (38.1)       |
| <b>Weight:</b> lbs/100 ft (kg/100 m) | 7.9 (11.8)       |

## ENVIRONMENTAL DATA

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

## ELECTRICAL DATA

|  |             |
|--|-------------|
| <b>Impedance:</b>                      | 50 ohms     |
| <b>Capacitance:</b> pF/ft (m)          | 24 (78.7)   |
| <b>Velocity of Propagation:</b>        | 83%         |
| <b>Time Delay:</b> ns/ft (m)           | 1.21 (3.97) |
| <b>Shielding Effectiveness:</b> dB/min | -110        |
| <b>DC Resistance:</b> ohms/1000 ft (m) | 1.3 (4.1)   |

## ATTENUATION DATA

| Frequency | Nom / Max<br>dB/100 ft | Nom / Max<br>dB/100 m |
|-----------|------------------------|-----------------------|
| @12.0 GHz | 15.4/17.0              | (50.5/55.8)           |
| @15.0 GHz | 17.7/19.5              | (58.1/64.0)           |
| @18.0 GHz | 19.7/21.8              | (64.6/71.5)           |

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

**K Values (nom loss):**  
 K1 = 0.111    K2 = 0.00027

*All values nominal, unless otherwise noted*

HH85295F HIGH FREQUENCY COAX CABLE

# CONTACTS/CONNECTORS FOR HH85295F

## M39012 CONNECTORS

| PART # | CONNECTOR TYPE    |
|--------|-------------------|
| 120608 | TNC Straight Plug |
| 120609 | TNC 90° Plug      |
| 120621 | TNC Bulkhead Jack |
| 120610 | N Straight Plug   |
| 120611 | N 90° Plug        |
| 120622 | N Bulkhead Jack   |
| 120614 | SMA Straight Plug |
| 120615 | SMA 90° Plug      |

*\*For quality assurance, this cable is sold in an assembly only.*