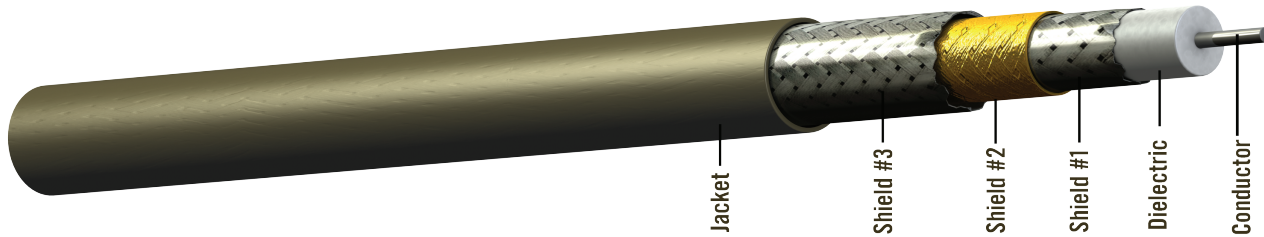


# HT77300F



## CABLE CONSTRUCTION

**Conductor:** Silver-Plated Copper

**Dielectric:** PTFE

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

**Shield #2:** Aluminum/Polyimide Foil

**Shield #3:** Silver-Plated Copper Braid

**Jacket:** Extruded FEP, Olive Drab

HT77300F is a 50-Ohm microwave coaxial cable designed for high-frequency applications on the Ku band and X band. HT77300F microwave cables give you superior signal integrity, low insertion loss, less RF interference, and a robust yet easy-to-install design. These are designed to optimize performance and give system designers flexibility.

## PHYSICAL DATA

<b>Conductor:</b>	12 AWG Solid SPC
<b>Temperature Range:</b>	-55 to +200°C
<b>Outer Diameter:</b> in (mm)	0.300 (7.62)
<b>Minimum Bend Radius:</b> in (mm)	1.5 (38.1)
<b>Weight:</b> lbs/100 ft (kg/100 m)	8.8 (13.1)

## 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

## ELECTRICAL DATA

<b>Impedance:</b>	50 ohms
<b>Capacitance:</b> pF/ft (m)	26.5 (86.9)
<b>Velocity of Propagation:</b>	77%
<b>Time Delay:</b> ns/ft (m)	1.33 (4.36)
<b>Shielding Effectiveness:</b> dB min	-90
<b>DC Resistance:</b> ohms/1000 ft (m)	1.4 (4.6)

## ATTENUATION DATA

Frequency	Nom / Max dB/100 ft	Nom / Max (dB/100 m)
@12.0 GHz	19.5/21.5	(64.0/70.5)
@15.0 GHz	22.2/24.4	(72.8/80.1)
@18.0 GHz	24.7/27.2	(81.0/89.2)

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

**K Values (nom loss):**  
 K1 = 0.15    K2 = 0.000255

*All values nominal, unless otherwise noted*

HT77300F HIGH FREQUENCY COAX CABLE

# CONTACTS/CONNECTORS FOR HT77300F

## M39012 CONNECTORS

PART #	CONNECTOR TYPE
120208	TNC Straight Plug
120209	TNC 90° Plug
120221	TNC Bulkhead Jack
120210	N Straight Plug
120211	N 90° Plug
120214	SMA Straight Plug
120215	SMA 90° Plug

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