1.85mm Male to 1.85mm Male Low Loss Cable 60 Inch Length Usi
ng 070 Coax

# RF Cable Assemblies Technical Data Sheet ET13307

## Configuration

- Connector 1: 1.85mm Male
- Connector 2: 1.85mm Male
- Cable Type: ET-SR070TNLL

## Features

- Max Frequency 70 GHz
- 76.5% Phase Velocity
- 500 Mating Cycles
- Maximum Cable Assembly Length of 5 Feet

## Applications

- General Purpose
- Laboratory Use

### Description

Ebeestock's ET13307 1.85mm male to 1.85mm male 60 inch cable using 070 coax is part of our full line of RF com- ponents available for same-day shipping. Ebeestock's semi-rigid RF cable assemblies are ideal for high performance appli- cations and can be formed, using proper tooling, to the routing pattern required. This Ebeestock 1.85mm to 1.85mm cable assembly has a male to male gender configuration with 50 ohm semi-rigid ET-SR070TNLL coax. The ET13307 1.85mm male to 1.85mm male cable assembly operates to 70 GHz.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other avail- able RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom label- ing. RF testing can also be performed to document the electrical performance of your cable assembly.

### Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|---|---|---|---|---|
| Frequency Range | DC | | 70 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 76.5 | | % |

### Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|---|---|---|---|---|---|---|
| Frequency | 0.5 | 1 | 5 | 10 | 18 | GHz |
| Insertion Loss (Typ.) | 0.62 | 0.88 | 1.98 | 2.82 | 3.82 | dB |

Electrical Specification Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 1.85mm Male to 1.85mm Male Low Loss Cable 60 Inch Length Using 070 Coax ET13307

8th Floor, Building 1, Yongfu Science and Technology Center Industrial Park,
Nanzha District 5, Humen,523900, Dongguan, Guangdong, China.

Webstie:www.ebeestock.com Email:sales@ebeestock.com

© 2022 Ebeestock Enterprises All Rights Reserved

# RF Cable Assemblies Technical Data Sheet ET13307

The Insertion Loss data above is based on the performance specifications of the coax cable used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.04*SQRT(FGHz) dB maximum per connector.

## Mechanical Specifications

### Cable Assembly

| | |
|---|---|
| Length* | 60 in [152.4 cm] |
| Diameter | 0.35 in [8.89 mm] |

### Cable

| | |
|---|---|
| Cable Type | ET-SR070TNLL |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper, Silver |
| Dielectric Type | Microporous PTFE |
| Number of Shields | 1 |
| Outer Conductor Material and Plating | Copper, Tin |
| One Time Minimum Bend Radius | 0.25 in [6.35 mm] |

### Connectors

| Description | Connector 1 | Connector 2 |
|---|---|---|
| Type | 1.85mm Male | 1.85mm Male |
| Impedance | 50 Ohms | 50 Ohms |
| Mating Cycles | 500 | 500 |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Contact Plating Specification | ASTM-B488 | ASTM-B488 |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Body Plating Specification | ASTM-B488 | ASTM-B488 |
| Coupling Nut Material and Plating | Steel | Steel |
| Torque | 8 in-lbs [0.9 Nm] | 8 in-lbs [0.9 Nm] |

## Environmental Specifications

### Temperature

| | |
|---|---|
| Operating Range | -65 to +150 deg C |

## Compliance Certifications (see product page for current document)

## Plotted and Other Data

Notes:

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: 1.85mm Male to 1.85mm Male Low Loss Cable 60 Inch Length Using 070 Coax ET13307

8th Floor, Building 1, Yongfu Science and Technology Center Industrial Park,
Nanzha District 5, Humen,523900, Dongguan, Guangdong, China.

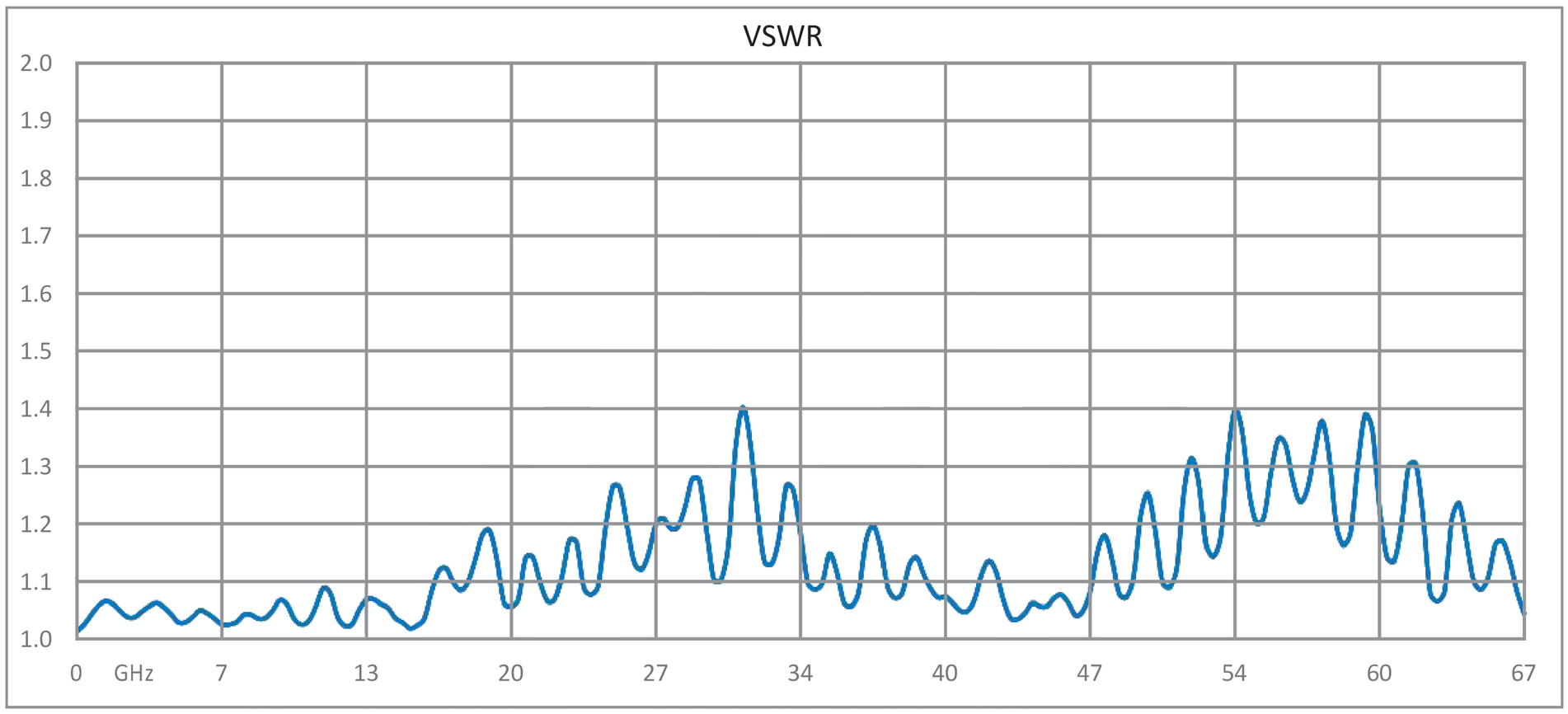
Webstie:www.ebeestock.com Email:sales@ebeestock.com

© 2022 Ebeestock Enterprises All Rights Reserved

1.85mm Male to 1.85mm Male Low Loss Cable 60 Inch Length Using 070 Coax

# RF Cable Assemblies Technical Data Sheet ET13307

**Typical Performance Data**




Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: 1.85mm Male to 1.85mm Male Low Loss Cable 60 Inch Length Using 070 Coax ET13307

8th Floor, Building 1, Yongfu Science and Technology Center Industrial Park,
Nanzha District 5, Humen,523900, Dongguan, Guangdong, China.

Webstie:www.ebeestock.com Email:sales@ebeestock.com

© 2022 Ebeestock Enterprises All Rights Reserved

1.85mm Male to 1.85mm Male Low Loss Cable 60 Inch Length Usi
ng 070 Coax

# RF Cable Assemblies Technical Data Sheet ET13307

## How to Order

Part Number Configuration: **ET3C6491 - xx uu**

- **uu** — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- **xx** — Length
- **ET3C6491** — Base Number

Example: ET3C6491-12 = 12 inches long cable
ET3C6491-100cm = 100 cm long cable

1.85mm Male to 1.85mm Male Low Loss Cable 60 Inch Length Using 070 Coax from Ebeestock Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: 1.85mm Male to 1.85mm Male Low Loss Cable 60 Inch Length Using 070 Coax ET13307

**URL:** https://www.ebeestock.com/1-85mm-male-to-1-85mm-male-low-loss-cable-6-inch-length-using-070-coax-0013301

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Ebeestock reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Ebeestock does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Ebeestock does not assume any liability arising out of the use of any part or documentation.

8th Floor, Building 1, Yongfu Science and Technology Center Industrial Park,
Nanzha District 5, Humen,523900, Dongguan, Guangdong, China.

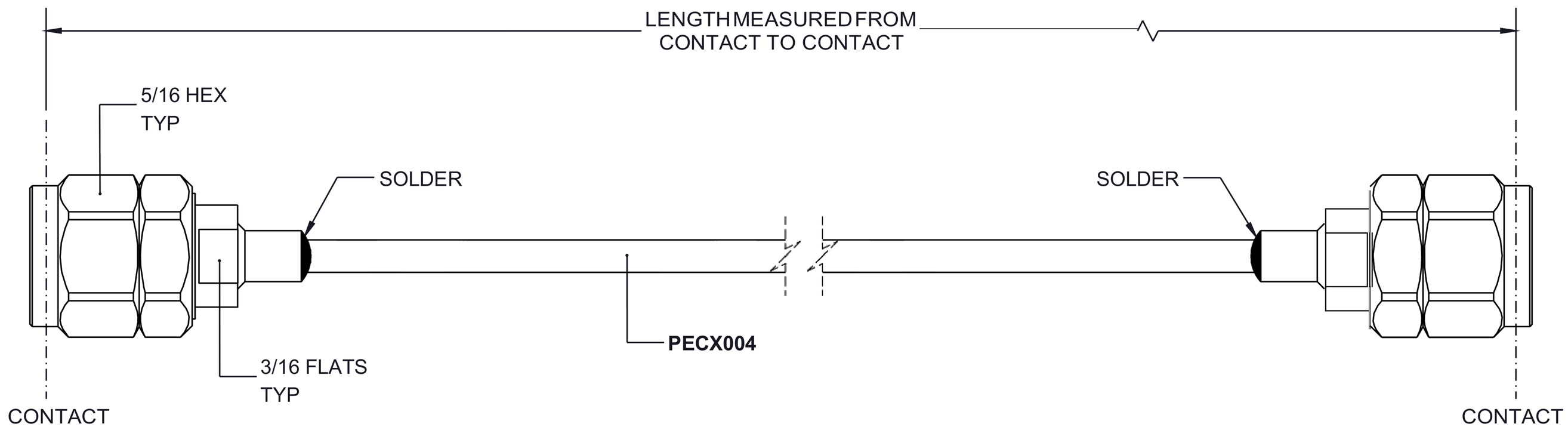
Webstie:www.ebeestock.com Email:sales@ebeestock.com

© 2022 Ebeestock Enterprises All Rights Reserved

© 2022 Ebeestock Enterprises All Rights Reserved

www.ebeestock.com

| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 09/11/19 | S.ELLIS |




**1.85mm**
**MALE**

**1.85mm**
**MALE**

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

| | | |
|---|---|---|
| .X=± .2 | [5.08] | FRACTIONS |
| .XX=± .01 | [ .25] | ± 1/32 |
| .XXX=± .005 | [ .13] | ANGLES ± 1° |

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD ANGLE PROJECTION

ebeestock
Ebeestock.com
8th Floor, Building 1, Yongfu Science
and Technology Center Industrial Park,
Nanzha District 5, Humen,523900, Dongguan, Guangdong, China.
**Webstie:** www.ebeestock.com **Email:** sales@ebeestock.com

THE INFORMATION AND
DESIGN IN THIS DOCUMENT
IS THE PROPERTY OF
Ebeestock CORPORATION. ALL
RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

| SIZE | CAGE | DRAWN BY | PART NUMBER | REV |
|---|---|---|---|---|
| A | 53919 | K.DANG | ET3C6491 | A |

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.