



086 Semi-rigid Coax Cable with Copper Outer Conductor

RF Cables Technical Data Sheet

RG405/U-BULK

Configuration

- Semi-Rigid Cable
- 1 Shield(s)

Features

- Copper Outer Conductor
- Max Frequency 40 GHz

Applications

- Test and Measurement
- Wireless Systems
- RADAR
- Communication Systems
- Medical Equipment
- Low Loss Applications

Description

Semi-rigid RG405/U coaxial cable provides the highest electrical performance including low loss and high RF shielding effectiveness, which is why it is the cable type of choice for many RF and microwave engineers. Pasternack's RG405 is a .086 semi-rigid cable constructed with silver plated copper clad steel inner conductor, solid PTFE dielectric and copper outer conductor. This .086 semi-rigid RG405 coaxial cable has a maximum operating frequency of 40 GHz. Semi-rigid cable is used in a wide variety of applications including when higher operating frequency or precision performance is required. The Pasternack RG405/U datasheet specifications and outline drawing for this semi-rigid coaxial cable are shown in the PDF below.

Pasternack carries a wide range of cables ready to ship same day to fit your needs. They are available in corrugated, flexible, formable or semi-rigid versions with different constructions of conductor materials, dielectric materials, shielding configurations and jacket materials. Our cables are designed to fit a wide range of performance criteria including attenuation, operating temperature, environmental factor, and power capability.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|--------------|---------|--------------|
| Frequency Range | DC | | 40 | GHz |
| Impedance | | 50 | | Ohms |
| Velocity of Propagation | | 69.5 | | % |
| Shielding Effectiveness | -110 | | | dB |
| Dielectric Withstanding Voltage (AC) | | | 5,000 | Vrms |
| Nominal Capacitance | | 29.4 [96.46] | | pF/ft [pF/m] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [086 Semi-rigid Coax Cable with Copper Outer Conductor RG405/U-BULK](#)



086 Semi-rigid Coax Cable with Copper Outer Conductor

RF Cables Technical Data Sheet

RG405/U-BULK

Performance by Frequency Band

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|-------|--------|-------|----|----|----------|
| Frequency | 1 | 10 | 20 | | | GHz |
| Attenuation, Max | 22 | 80 | 120 | | | dB/100ft |
| | 72.18 | 262.47 | 393.7 | | | dB/100m |
| Input Power (CW), Max | 130 | 35 | 20 | | | Watts |

Mechanical Specifications

Min. Bend Radius (Repeated) 0.05 in [1.27 mm]

Construction Specifications

| Description | Material and Plating | Diameter |
|-----------------|-------------------------------------|--------------------|
| Inner Conductor | Copper Clad Steel, Silver, 1 Strand | 0.02 in [0.51 mm] |
| Conductor Type | Solid | |
| Dielectric | PTFE | 0.066 in [1.68 mm] |
| Outer Conductor | Copper | 0 in [0 mm] |
| Jacket | Tan | [] |

Environmental Specifications

Temperature

Operating Range -55 to +125 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [086 Semi-rigid Coax Cable with Copper Outer Conductor RG405/U-BULK](#)



086 Semi-rigid Coax Cable with Copper Outer Conductor

RF Cables Technical Data Sheet

RG405/U-BULK

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

Plotted and Other Data

Notes:

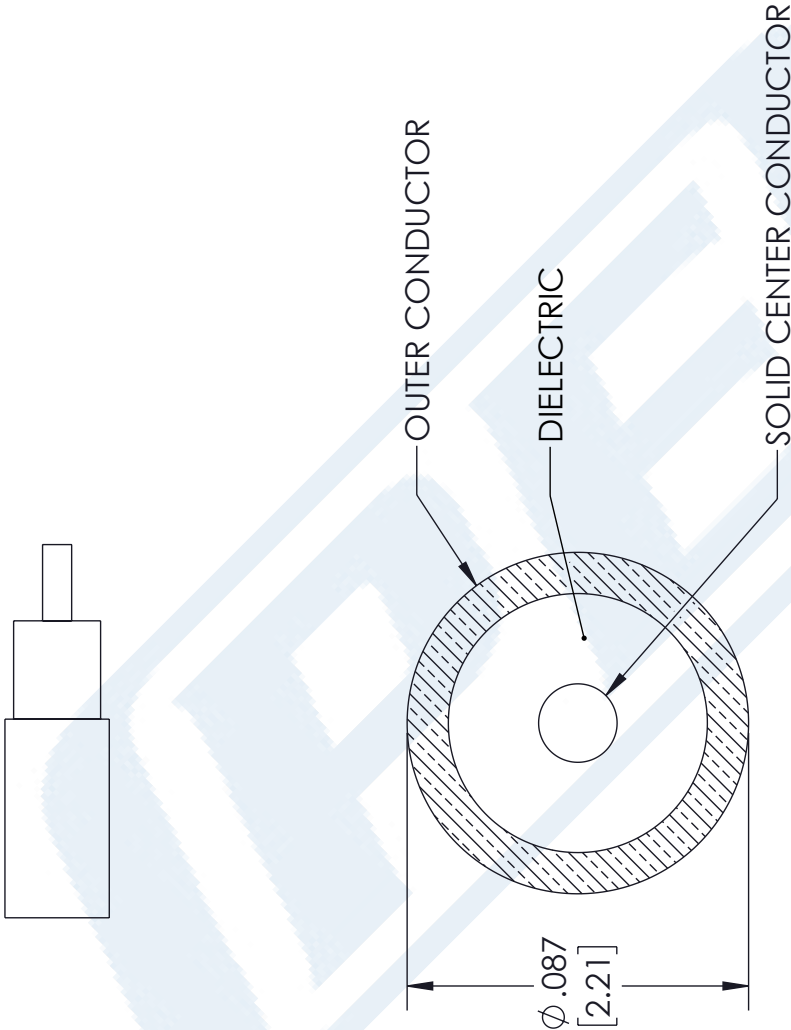
086 Semi-rigid Coax Cable with Copper Outer Conductor from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [086 Semi-rigid Coax Cable with Copper Outer Conductor RG405/U-BULK](#)

URL: <https://www.pasternack.com/semirigid-0.085-rg405-50-ohm-coax-cable-copper-rg405-u-bulk-p.aspx>

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. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

| REVISIONS | | | |
|-----------|-----------------|------------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 03/07/2022 | AGANWANI |



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

TOLERANCES:

| | | | |
|---------------|---------|------------------|-------------|
| X = ± .2 | [.508] | FRACTIONS | ± 1/32 |
| .XX = ± .02 | [.51] | ANGLES | ± 1° |
| .XXX = ± .005 | [.13] | CABLE LENGTH (L) | TOLERANCES: |

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

PE PASTERNAK
an INFINITI brand

Pasternack Enterprises, Inc.
P.O. Box 16759, Irvine, CA 92623.
Phone: 1.949.261.1920 | 1.866.727.8376
Fax: 1.949.261.7451
Website: www.pasternack.com
E-mail: sales@pasternack.com

THIRD-ANGLE PROJECTION

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

SHEET 1 OF 1

SCALE N/A

| | | | |
|------|-----------|----------|--------------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A | 53919 | DZINN | RG405/U-BULK |
| REV | | | 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.