



## SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS

### RF Connectors Technical Data Sheet

PE45498

#### Configuration

- SSMC Plug Connector
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: RG316-DS, RG188-DS

#### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.62:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Reliable threaded coupling
- Small SSMC connector form factor (50% smaller than SMA, radially)
- IEC 60169-20 SSMC connector interface
- In stock and ready to ship

#### Applications

- General Purpose Test
- Custom Cable Assemblies
- Avionics
- A/D Modules
- Data Acquisition
- Software defined radio (SDR)
- RADAR/SONAR
- Ultra Wideband Digital Receivers
- Medical equipment

#### Description

Pasternack's PE45498 SSMC plug right angle connector with crimp/solder attachment for RG316-DS and RG188-DS is part of our full line of RF components available for same-day shipping. Our SSMC plug connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.62:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SSMC plug right angle connector PE45498 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Electrical Specifications

| Description                     | Minimum | Typical | Maximum | Units |
|---------------------------------|---------|---------|---------|-------|
| Frequency Range                 | DC      |         | 12.4    | GHz   |
| VSWR                            |         |         | 1.62:1  |       |
| Insertion Loss                  |         |         | 0.3     | dB    |
| Operating Voltage (AC)          |         |         | 250     | Vrms  |
| High Potential Voltage<br>5 MHz |         |         | 400     | Vrms  |
| Inner Conductor DC Resistance   |         |         | 4       | mOhms |
| Outer Conductor DC Resistance   |         |         | 1       | mOhms |
| Insulation Resistance           | 1,000   |         |         | MOhms |
| RF Leakage                      | -50     |         |         | dB    |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS PE45498](#)



## SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS

### RF Connectors Technical Data Sheet

PE45498

#### Mechanical Specifications

##### Size

Length

0.421 in [10.69 mm]

Width/Dia.

0.156 in [3.96 mm]

Height

0.33 in [8.38 mm]

Mating Cycles

500 Cycles

Mating Torque

1.75 to 2 in-lbs [0.20 to 0.23 Nm]

#### Material Specifications

| Description  | Material         | Plating             |
|--------------|------------------|---------------------|
| Contact      | Beryllium Copper | Gold<br>MIL-G-45204 |
| Insulation   | Teflon           |                     |
| Body         | Brass            | Gold<br>MIL-G-45204 |
| Coupling Nut | Beryllium Copper | Gold<br>MIL-G-45204 |
| Crimp Sleeve | Brass            | Gold<br>MIL-G-45204 |

#### Environmental Specifications

##### Temperature

Operating Range

-65 to +165 deg C

Shock

Method 213, Condition B, 75G @6ms @1/2 sine

Vibration

Method 204, Condition D (20G)

Salt Spray

Method 101, Condition B, 5% salt solution

**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: [SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS PE45498](#)



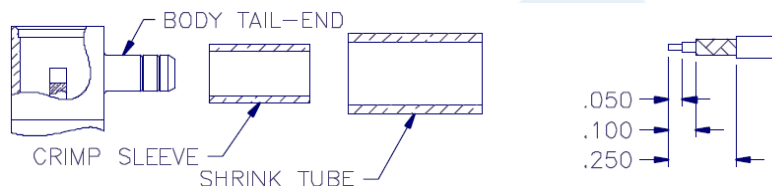
## SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS

### RF Connectors Technical Data Sheet

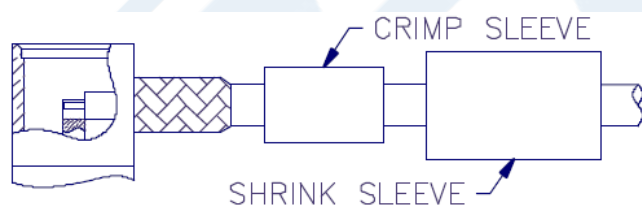
PE45498

#### Assembly Instruction

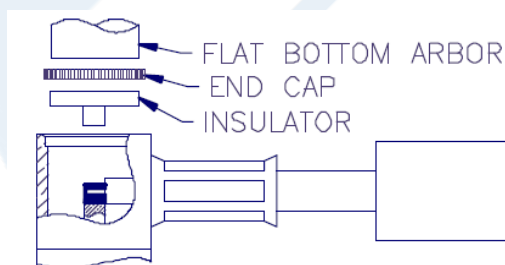
#### Assembly Instructions



1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE (IF SUPPLIED) OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



4. INSERT CABLE ASSEMBLY INTO BODY TAIL-END MAKING SURE TAIL GOES OVER DIELECTRIC AND UNDER BRAID. SLIDE IN UNTIL BRAID TOUCHES REAR SURFACE OF BODY.
5. SLIDE CRIMP SLEEVE FORWARD AND USE .105 HEX DIE TO CRIMP SLEEVE TO BRAID.



6. SOLDER CENTER CONDUCTOR OF CABLE TO CONTACT.
7. PLACE INSULATOR AND END CAP INTO CONNECTOR BODY AS SHOWN AND USE A .185" DIAMETER FLAT BOTTOM PUNCH TO PRESS CAP IN PLACE. CAP MUST BE BELOW SURFACE TO SEAT PROPERLY.
8. SLIDE SHRINK TUBE (IF SUPPLIED) OVER CRIMP SLEEVE AND SHRINK TO FIT.

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PE45498

SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS 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.

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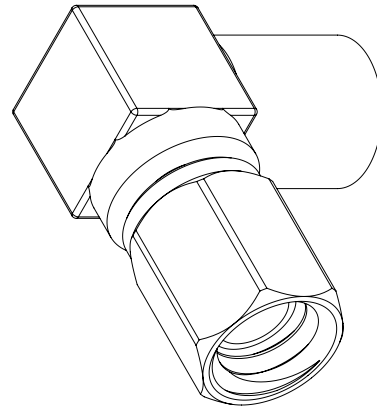
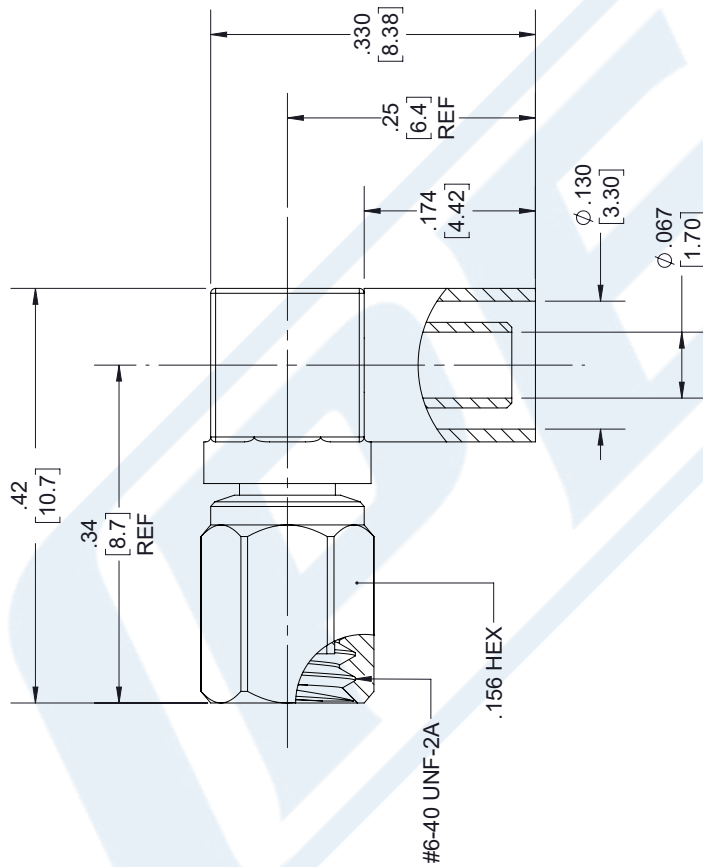
URL: <https://www.pasternack.com/ssmc-plug-rg316-ds-rg188-ds-connector-pe45498-p.aspx>

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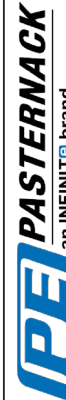
# PE45498 CAD Drawing

SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS

| REVISIONS |                 |          |          |
|-----------|-----------------|----------|----------|
| REV.      | DESCRIPTION     | DATE     | APPROVED |
| A         | INITIAL RELEASE | 09/04/19 | SELLIS   |



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| TOLERANCES:   | FRACTIONS |
| X $\pm$ .2  | [5.08]    |
| XX $\pm$ .01  | [.25]     |
| XXX $\pm$ .005  | [.13]     |
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| THIRD-ANGLE PROJECTION  |           |



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P.O. Box 16759, Irvine, CA 92623.  
Phone: 1.949.261.1920 | 1.866.727.8376  
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www.pasternack.com | e-mail: sales@pasternack.com

| SIZE | CAGE  | DRAWN BY | PART NUMBER | REV |
|------|-------|----------|-------------|-----|
| A    | 53919 | K.DANG   | PE45498     | A   |

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##### Size

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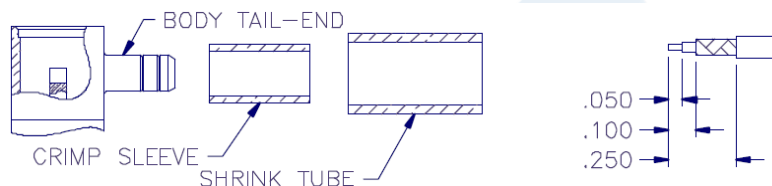
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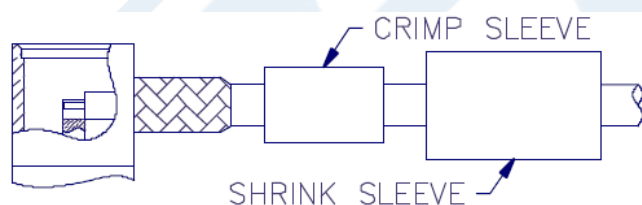
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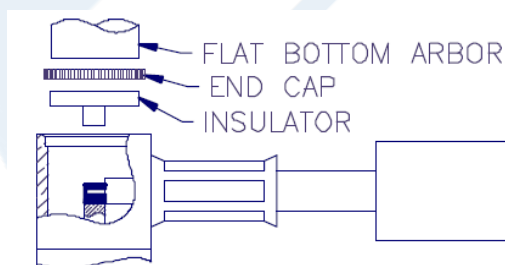
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URL: <https://www.pasternack.com/ssmc-plug-rg316-ds-rg188-ds-connector-pe45498-p.aspx>

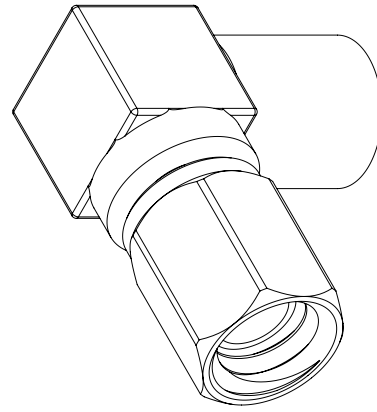
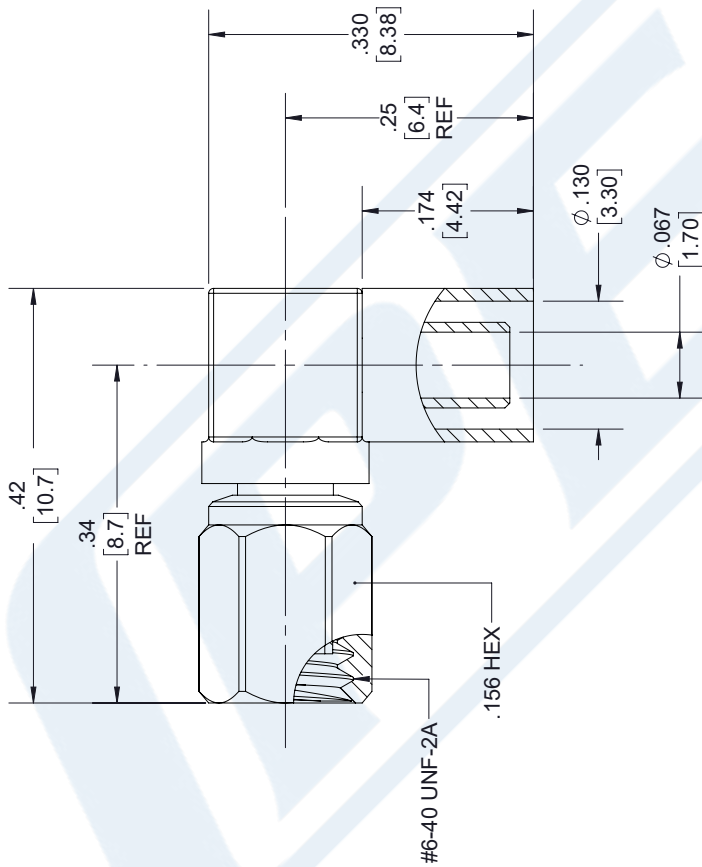
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# PE45498 CAD Drawing

SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS

## REVISIONS

| REV. | DESCRIPTION     | DATE     | APPROVED |
|------|-----------------|----------|----------|
| A    | INITIAL RELEASE | 09/04/19 | SELLIS   |



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| TOLERANCES:   | FRACTIONS            |
| X $\pm$ .2 [5.08]   | $\pm .132$           |
| XX $\pm$ .01 [ .25]   | $\pm .005$           |
| XXX $\pm$ .005 [ .13]   | ANGLES $\pm 1^\circ$ |
| ALL DIMENSIONS SHOWN<br>ARE FOR REFERENCE ONLY.   |                      |
| THIRD-ANGLE PROJECTION  |                      |

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| SIZE  | CAGE    |
| A   | 53919   |
| DRAWN BY  | K.DANG  |
| PART NUMBER   | PE45498 |
| REV   | A       |

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# Flexible RG316-DS Coax Cable Double Shielded with Tan FEP Jacket

## RF Cables Technical Data Sheet

RG316-DS

### Configuration

- Flexible Cable
- 2 Shield(s)

### Electrical Specifications

| Description                   | Minimum | Typical       | Maximum | Units        |
|-------------------------------|---------|---------------|---------|--------------|
| Frequency Range               | DC      |               | 3       | GHz          |
| Impedance                     |         | 50            |         | Ohms         |
| Velocity of Propagation       |         | 69.5          |         | %            |
| Shielding Effectiveness       | 85      |               |         | dB           |
| Operating Voltage (AC)        |         |               | 1,200   | Vrms         |
| Inner Conductor DC Resistance |         |               | 83.82   | Ohms/1000ft  |
| Outer Conductor DC Resistance |         |               | 5.33    | Ohms/1000ft  |
| Nominal Capacitance           |         | 28.96 [95.01] |         | pF/ft [pF/m] |
| Insulation Resistance         | 304.8   |               |         | MOhms/1000ft |

### Performance by Frequency Band

| Description           | F1    | F2    | F3     | F4    | F5     | Units    |
|-----------------------|-------|-------|--------|-------|--------|----------|
| Frequency             | 0.1   | 0.4   | 1      | 2     | 3      | GHz      |
| Attenuation, Max      | 10.97 | 20.97 | 37.95  | 45.05 | 57.94  | dB/100ft |
|                       | 35.99 | 68.8  | 124.51 | 147.8 | 190.09 | dB/100m  |
| Attenuation, Typ      | 8.29  | 17.5  | 29     | 39.41 | 53.55  | dB/100ft |
|                       | 27.2  | 57.41 | 95.14  | 129.3 | 175.69 | dB/100m  |
| Input Power (CW), Max | 375   | 185   | 120    | 85    | 65     | Watts    |

### Mechanical Specifications

|                                 |                          |
|---------------------------------|--------------------------|
| Diameter                        | 0.114 in [2.9 mm]        |
| Weight                          | 0.015 lbs/ft [0.02 Kg/m] |
| Min. Bend Radius (Installation) | 0.59 in [14.99 mm]       |
| Min. Bend Radius (Repeated)     | 1.57 in [39.88 mm]       |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG316-DS Coax Cable Double Shielded with Tan FEP Jacket RG316-DS](#)

## Flexible RG316-DS Coax Cable Double Shielded with Tan FEP Jacket

### RF Cables Technical Data Sheet

RG316-DS

#### Construction Specifications

| Description     | Material and Plating                 | Diameter          |
|-----------------|--------------------------------------|-------------------|
| Inner Conductor | Copper Clad Steel, Silver, 7 Strands | 0.02 in 0.51 mm   |
| Conductor Type  | Stranded                             |                   |
| Dielectric      | PTFE                                 | 0.06 in [1.52 mm] |
| First Shield    | Silver Plated Copper Braid           |                   |
| Second Shield   | Silver Plated Copper Braid           | 0.094 in 2.39 mm  |
| Jacket          | FEP, Tan                             | 0.114 in [2.9 mm] |

#### Environmental Specifications

##### Temperature

Operating Range

-55 to +200 deg C

Storage Range

0 to +40 deg C

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

#### Plotted and Other Data

Notes:

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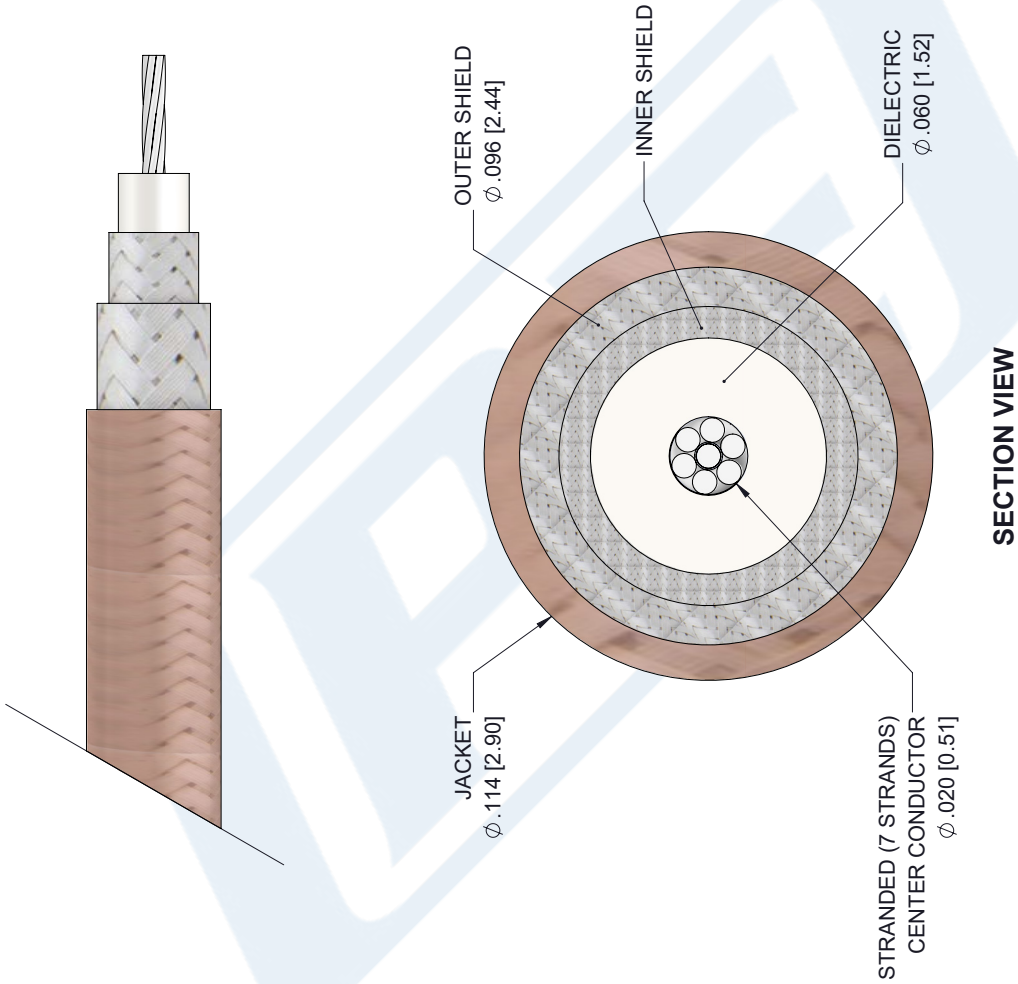
URL: <https://www.pasternack.com/flexible-0.114-rg316-ds-50-ohm-coax-cable-fep-jacket-rg316-ds-p.aspx>

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RG316-DS CAD Drawing

Flexible RG316-DS Coax Cable Double Shielded with Tan FEP Jacket

| REVISIONS |                       |          |          |
|-----------|-----------------------|----------|----------|
| REV.      | DESCRIPTION           | DATE     | APPROVED |
| 1.1       | PCR RG316-DS 20190701 | 07/15/19 | S.ELLIS  |



|  |        |             |       |
|--|--------|-------------|-------|
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| TOLERANCES:  |        |             |       |
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| XX±.01   | [.25]  |             | ±.132 |
| XXX±.005   | [.13]  | ANGLES ± 1° |       |
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| THIRD-ANGLE PROJECTION   |        |             |       |
|  |        |             |       |

|  |       |   |             |
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| SIZE   | CAGE  | DRAWN BY  | PART NUMBER |
| A  | 53919 | K.Dang  | RG316-DS    |
|  |       |   | REV         |
|  |       |   | A           |

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