086 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor

RF Cables
Technical Data Sheet

PE-SR405AL

Configuration
- Semi-Rigid Cable
- 1 Shield(s)

Features
- Tinned Aluminum Outer Conductor
- Max Frequency 40 GHz

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

Description
Semi-rigid 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 PE-SR405AL is a .086 semi-rigid coax cable constructed with silver plated copper clad steel inner conductor, solid PTFE dielectric and tinned aluminum outer conductor. This .086 semi-rigid cable has a maximum operating frequency of 40 GHz and is designed as a superior alternative to the standard RG-405 cable. Semi-rigid cable is used in a wide variety of applications including when higher operating frequency or precision performance is required. PE-SR405AL .086 semi-rigid coaxial cable datasheet specifications and outline drawing 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

<table>
<thead>
<tr>
<th>Description</th>
<th>Minimum</th>
<th>Typical</th>
<th>Maximum</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>DC</td>
<td></td>
<td>40</td>
<td>GHz</td>
</tr>
<tr>
<td>Impedance</td>
<td></td>
<td></td>
<td>50</td>
<td>Ohms</td>
</tr>
<tr>
<td>Dielectric Withstanding Voltage (AC)</td>
<td></td>
<td></td>
<td>5,000</td>
<td>Vrms</td>
</tr>
</tbody>
</table>

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 Tinned Aluminum Outer Conductor PE-SR405AL
086 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor

RF Cables Technical Data Sheet

Performance by Frequency Band

<table>
<thead>
<tr>
<th>Description</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>F5</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>1</td>
<td>10</td>
<td>20</td>
<td></td>
<td></td>
<td>GHz</td>
</tr>
<tr>
<td>Attenuation, Max</td>
<td>23</td>
<td>81</td>
<td>131</td>
<td>75.46</td>
<td>265.75</td>
<td>429.79</td>
</tr>
<tr>
<td>Input Power (CW), Max</td>
<td>130</td>
<td>35</td>
<td>20</td>
<td></td>
<td></td>
<td>Watts</td>
</tr>
</tbody>
</table>

Mechanical Specifications

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

Construction Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Material and Plating</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner Conductor</td>
<td>Copper Clad Steel, Silver, 1 Strands</td>
<td>0.02 in [0.51 mm]</td>
</tr>
<tr>
<td>Conductor Type</td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td>Dielectric</td>
<td>PTFE</td>
<td>0.066 in [1.68 mm]</td>
</tr>
<tr>
<td>Outer Conductor</td>
<td>Tinned Aluminum</td>
<td>0.086 in [2.18 mm]</td>
</tr>
</tbody>
</table>

Environmental Specifications

Temperature

Operating Range -55 to +125 deg C
086 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

086 Semi-rigid Coax Cable with Tinned Aluminum 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.

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