AMERICAN NATIONAL STANDARD

ANSI/SCTE 116 2018

Specification for 5/8-24 Port, Female Adapters
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1. Introduction

1.1. Executive Summary
Mechanical Specification that define the Female 5/8-24 Adapter Ports.

1.2. Scope
The purpose of this specification is to serve as a recommended guideline for the physical dimensions of female 5/8 - 24 port that is used on hard-line adapters for interconnection in the 75 ohm RF broadband communications industry. It is not the purpose of this standard to specify the details of manufacturing.

1.3. Benefits
Specification for uniform compliance.

1.4. Intended Audience
Equipment manufacturers.

1.5. Areas for Further Investigation or to be Added in Future Versions
None

2. Normative References
The following documents contain provisions, which, through reference in this text, constitute provisions of this document. At the time of Subcommittee approval, the editions indicated were valid. All documents are subject to revision; and while parties to any agreement based on this document are encouraged to investigate the possibility of applying the most recent editions of the documents listed below, they are reminded that newer editions of those documents might not be compatible with the referenced version.

2.1. SCTE References
• No normative references are applicable.

2.2. Standards from Other Organizations
• No normative references are applicable.

2.3. Published Materials
• No normative references are applicable.

3. Informative References
The following documents might provide valuable information to the reader but are not required when complying with this document.
3.1. SCTE References

- No informative references are applicable.

3.2. Standards from Other Organizations

- No informative references are applicable.

3.3. Published Materials

- No informative references are applicable.

4. Compliance Notation

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>shall</strong></td>
<td>This word or the adjective “required” means that the item is an absolute requirement of this document.</td>
</tr>
<tr>
<td><strong>shall not</strong></td>
<td>This phrase means that the item is an absolute prohibition of this document.</td>
</tr>
<tr>
<td><strong>forbidden</strong></td>
<td>This word means the value specified shall never be used.</td>
</tr>
<tr>
<td><strong>should</strong></td>
<td>This word or the adjective “recommended” means that there may exist valid reasons in particular circumstances to ignore this item, but the full implications should be understood and the case carefully weighted before choosing a different course.</td>
</tr>
<tr>
<td><strong>should not</strong></td>
<td>This phrase means that there may exist valid reasons in particular circumstances when the listed behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label.</td>
</tr>
<tr>
<td><strong>may</strong></td>
<td>This word or the adjective “optional” means that this item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because it enhances the product, for example; another vendor may omit the same item.</td>
</tr>
<tr>
<td><strong>deprecated</strong></td>
<td>Use is permissible for legacy purposes only. Deprecated features may be removed from future versions of this document. Implementations should avoid use of deprecated features.</td>
</tr>
</tbody>
</table>

5. Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Plane</td>
<td>The reference plane on the female 5/8-24 port is the mating surface that seats with the male 5/8-24 port.</td>
</tr>
</tbody>
</table>

6. General Requirements

Samples of the finished products shall be inspected to ensure that they conform to the physical dimensions specified in this document.

7. Physical Dimensions

The recommended physical dimensions for 5/8-24 female adapter ports shall be as specified in Figure 1.
Figure 1 - Physical Dimensions for 5/8-24 Port, Adapter Female
Table 1

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>DIM</th>
<th>mm</th>
<th>inches</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-RING GLAND INTERNAL DIAMETER</td>
<td>A</td>
<td>16.21-16.38</td>
<td>0.638-0.645</td>
<td></td>
</tr>
<tr>
<td>CHAMFER ANGLE</td>
<td>C</td>
<td>40°-50°</td>
<td>40°-50°</td>
<td></td>
</tr>
<tr>
<td>CHAMFER LENGTH</td>
<td>D</td>
<td>0.25-0.64</td>
<td>0.010-0.025</td>
<td>3</td>
</tr>
<tr>
<td>FULL THREAD DEPTH</td>
<td>E</td>
<td>9.65-2.79</td>
<td>0.330-0.110</td>
<td>10</td>
</tr>
<tr>
<td>O-RING GLAND DEPTH</td>
<td>F</td>
<td>2.29-2.79</td>
<td>0.090-0.110</td>
<td></td>
</tr>
<tr>
<td>ADAPTER EXTERNAL DIAMETER</td>
<td>G</td>
<td>18.66-18.91</td>
<td>0.735-0.745</td>
<td></td>
</tr>
</tbody>
</table>

NOTES:

1. Drawing not to scale.
2. Interpret drawing in accordance with asme y14.5m-1994.
3. Radius optional.
4. Reference only: typical machining practice allows 0.030 in (0.76 mm) max chamfer (45°).
5. Typical machining practice allows 0.083 in (2.11 mm) max. Bottoming tap clearance be provided in addition to thread depth “e”.