

# A6HM-S



4.3-10 Male for 1-1/4 in AVA6-50 cable

## Product Classification

|                |                                  |
|----------------|----------------------------------|
| Product Type   | Wireless and radiating connector |
| Product Brand  | HELIAX®                          |
| Product Series | AVA6-50   AVA6RK-50              |

## General Specifications

|                                 |  |
|---------------------------------|--|
| Body Style                      | Straight   |
| Cable Family                    | AVA6-50  |
| Harmonized System (HS) Code     | 85366910 (Coaxial cable and other coaxial electric conductors) |
| Inner Contact Attachment Method | Captivated   |
| Inner Contact Plating           | Silver   |
| Interface                       | 4.3-10 Male  |
| Mounting Angle                  | Straight   |
| Outer Contact Attachment Method | Clamp  |
| Outer Contact Plating           | Trimetal   |

## Dimensions

|              |                    |
|--------------|--------------------|
| Length       | 60.3 mm   2.374 in |
| Diameter     | 49 mm   1.929 in   |
| Nominal Size | 1-1/4 in           |

## Electrical Specifications

|                                     |  |
|-------------------------------------|--|
| 3rd Order IMD at Frequency          | -117 dBm @ 1800 MHz                                    |
| 3rd Order IMD Test Method           | Two +43 dBm carriers                                   |
| Insertion Loss Coefficient, typical | 0.05   |
| Return Loss Note                    | Measurements taken using a .9 m (3 ft) jumper assembly |
| Connector Impedance                 | 50 ohm   |
| Operating Frequency Band            | 0 – 4000 MHz   |

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## VSWR/Return Loss

| Frequency Band | VSWR | Return Loss (dB) |
|----------------|------|------------------|
| 0–1000 MHz     | 1.02 | 40.09            |
| 1000–2700 MHz  | 1.04 | 34.16            |
| 2700–3300 MHz  | 1.07 | 29.42            |

## Mechanical Specifications

|                              |                       |
|------------------------------|-----------------------|
| Coupling Nut Proof Torque    | 10 N-m   88.507 in lb |
| Interface Durability Method  | IEC 61169-4:9.5       |
| Mechanical Shock Test Method | IEC 60068-2-27        |

## Environmental Specifications

|                                    |                                      |
|------------------------------------|--------------------------------------|
| Operating Temperature              | -55 °C to +85 °C (-67 °F to +185 °F) |
| Storage Temperature                | -55 °C to +85 °C (-67 °F to +185 °F) |
| Attenuation, Ambient Temperature   | 20 °C   68 °F                        |
| Average Power, Ambient Temperature | 40 °C   104 °F                       |
| Corrosion Test Method              | IEC 60068-2-11                       |
| Immersion Depth                    | 1 m                                  |
| Immersion Test Mating              | Mated                                |
| Immersion Test Method              | IEC 60529:2001, IP68                 |
| Moisture Resistance Test Method    | IEC 60068-2-3                        |
| Thermal Shock Test Method          | IEC 60068-2-14                       |
| Vibration Test Method              | IEC 60068-2-6                        |
| Water Jetting Test Mating          | Mated                                |
| Water Jetting Test Method          | IEC 60529:2001, IP66                 |

## Packaging and Weights

|             |                 |
|-------------|-----------------|
| Weight, net | 295 g   0.65 lb |
|-------------|-----------------|

## Regulatory Compliance/Certifications

| Agency        | Classification   |
|---------------|--|
| CHINA-ROHS    | Above maximum concentration value  |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

# A6HM-S

|         |                    |
|---------|--------------------|
| ROHS    | Compliant/Exempted |
| UK-ROHS | Compliant/Exempted |



## \* Footnotes

|  |  |
|--|--|
| <b>Insertion Loss Coefficient, typical</b> | $0.05\sqrt{\text{freq (GHz)}}$ (not applicable for elliptical waveguide) |
| <b>Immersion Depth</b>                     | Immersion at specified depth for 24 hours                                |