**SERIES 89 NANOMINIATURE CONNECTORS**

Circular and Rectangular Connectors

**RoHS Compliance Guidelines**

**TwistPin Connectors and RoHS Compliance**

European Union Directive 2011/65/EU, with amendment 2015/863, on Restriction of the use of certain Hazardous Substances ("RoHS") states that certain types of equipment (primarily consumer electronic products such as personal computers) shall not contain lead, mercury, cadmium, hexavalent chromium, PBB, PBDE, DEHP, BBP, DBP, or DIBP. For the record, Glenair does not produce any OEM products of this type. Furthermore, our interconnect components are either free of the substances RoHS controls, or specifically intended for use in military-aerospace applications that are exempt. Please contact the factory to verify all components meet RoHS compliance regulations.

**Are Nano Connectors RoHS compliant?**

The products in this catalog can be ordered with various plating finishes. Some finishes for example cadmium along with solder-dipping, do not comply with the RoHS directive.

**Why doesn’t Glenair eliminate non-RoHS products?**

Glenair products are typically used in defense and aerospace equipment exempt from RoHS requirements. Glenair continues to offer cadmium and chromate finishes in accordance with DoD and aerospace specifications. Our part numbers contain a broad range of finish and component options. RoHS compliant finishes can easily be requested if desired.

**Examples of products that do not comply with RoHS regulations:**

1. **Cadmium plating.**
   - Is available on metal shell connectors in this catalog. Note that cadmium plating does not currently comply with RoHS rules.

2. **Tin-lead solder dipped printed circuit board tails.**
   - Board mount M32139 Nanos and other products are normally solder dipped in 63% tin 37% lead or 60% tin 40% lead molten solder. RoHS compliance for consumer products requires elimination of solder coatings containing lead.

**Examples of RoHS materials for easy selection**

1. **Specify electroless nickel plating on the connector shell.**
   - Or, choose stainless steel shells for maximum corrosion protection and RoHS compliance.

2. **Use Mod Code 513 on Nano board mount connectors.**
   - Board mount Nanominiatures and other products normally solder dipped in 63% tin 37% or 60% tin 40% lead molten solder. Any solder-dipped part can be supplied with RoHS compliant gold-plating instead, by simply adding Mod Code 513 as a suffix to the standard part number.

**Nano Connector RoHS Material Examples**

<table>
<thead>
<tr>
<th>Nano Connector Plating Codes: RoHS Compliance</th>
<th>Nano Connector RoHS Material Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nano Plating Code</strong></td>
<td><strong>Part Number</strong></td>
</tr>
<tr>
<td>Cadmium with yellow chromate conversion coating over electroless nickel</td>
<td>891-001-25PA1-125</td>
</tr>
<tr>
<td>Electroless nickel</td>
<td>891-008-25PA2-BRTIT</td>
</tr>
<tr>
<td>Stainless steel shell, passivated</td>
<td>891-008-25PA1-BRTIT</td>
</tr>
<tr>
<td>Titanium, unplated</td>
<td>891-001-25PA1-125</td>
</tr>
</tbody>
</table>