
Table of Contents

CII High Reliability Space Relays4-2, 4-3

CII High Reliability Space Relays

Product Testing



Tyco Electronics CII High Reliability Space Relay products begin as relays manufactured to MIL-Spec requirements. They then receive additional processing and testing to particular customer specifications.

All operations and processes are documented as required by MIL-STD-790. Each operation and process has an accompanying route sheet that allows tracking of all materials and processes associated with an order. For those who require additional information, we can serialize, track and document the data for individual relays.

In addition to quality audits throughout the manufacturing

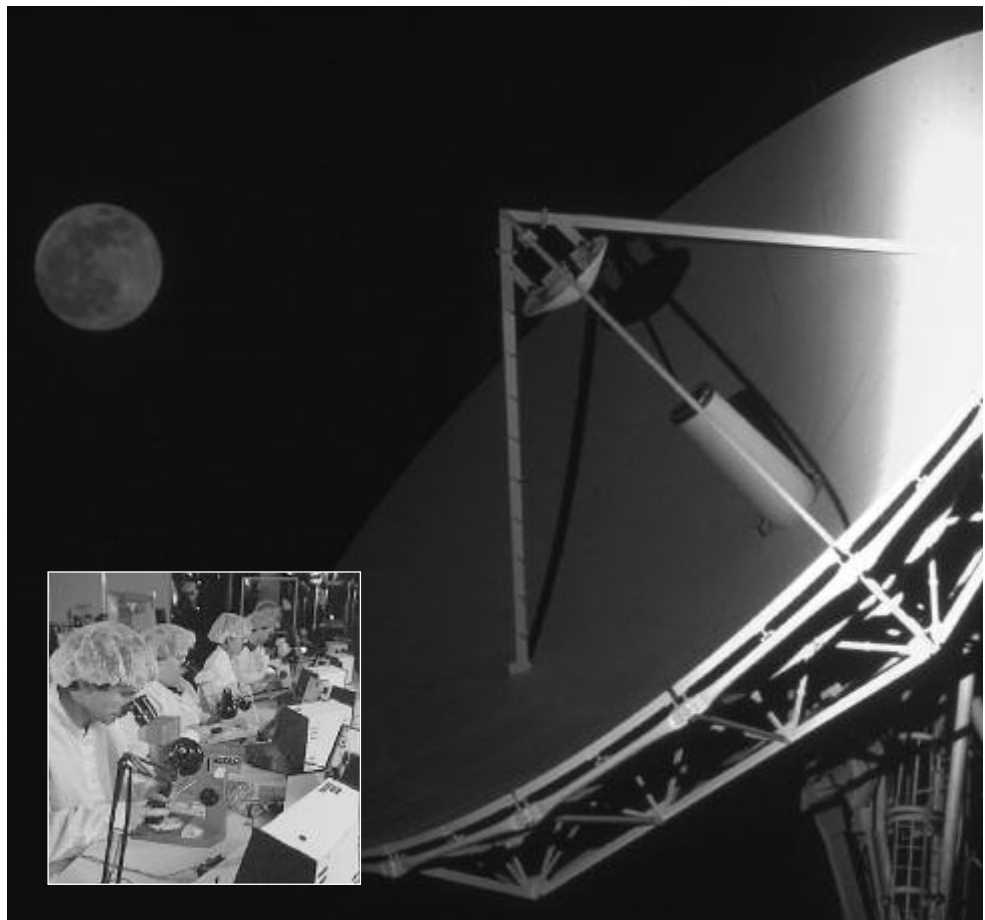


process, our High Reliability Space relays are extensively

tested to assure that your High Reliability standards and requirements are met or exceeded.

Our High Reliability Space Relay products are tested 100% for Group A parameters and then subjected to additional testing including: PIND, Small Particle Cleaning, Random, Vibration, and X-Ray. Group B and C testing is done for lot integrity based on MIL-R-39016. These test profiles are tailored to your individual requirements.

Destructive testing is often performed, based on the actual application of the device. On a "standard" QPL relay, this testing is performed periodically, and performance is assumed for the period of manufacture.



In the High Reliability Space Relay, this performance is proven for each relay lot based on the testing and documentation of each serialized relay.

Clean Room

All of our High Reliability Space Relay products are manufactured in a temperature and humidity controlled environment utilizing a clean room area for sub-assemblies. All final assembly, intermediate testing, small particle cleaning, pre-cap inspection, and sealing is

performed in an integrated, Class 1000 clean room that is temperature and humidity controlled in accordance with Federal Standard 209E. Temperature, humidity and air particle counts are monitored for precise control to ensure the integrity of the internal relay environment.



CII High Reliability Space Relays (Continued)

Products

■ **Half Size Non-Latching**

Available in 2, 4 and 6 Form C configurations, low level to 5 amp switching.

■ **Half Size Latching**

Available in 2 and 4 Form C configurations, low level to 2 amp switching.

■ **One Fifth Non-Latching**

2 Form C, low level 2 amp switching.

■ **TO-5/.100 Grid**

Available in 2 Form C, round and square outlines, low level to 1 amp switching, military qualified, optional spreader and mounting pads, ground pins, internal diodes, transistors, and hybrid assemblies.

Services

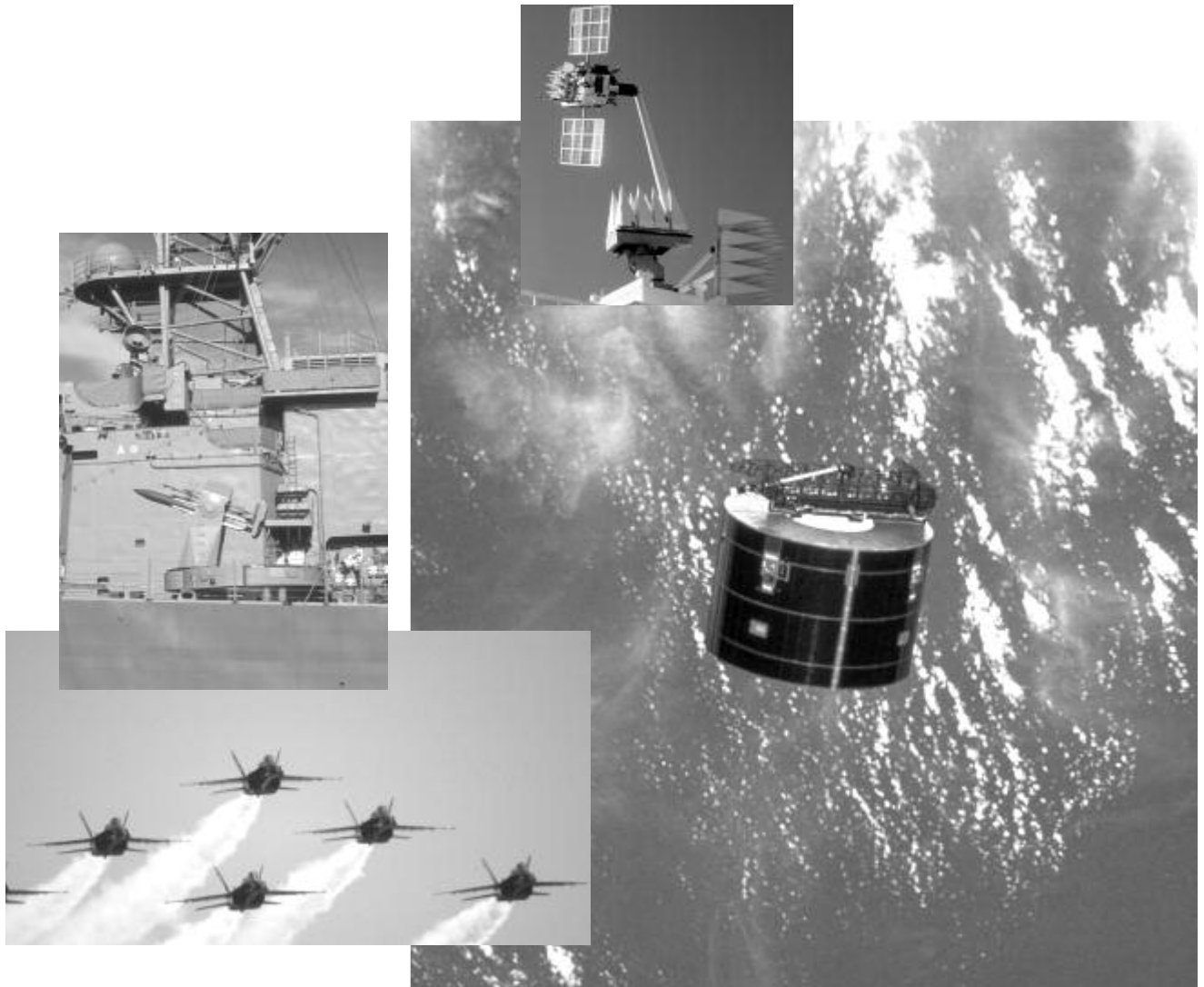
Our engineering staff, with over 100 years of combined experience in aerospace and High Reliability mil-spec relays, will help you find the right product for your needs. Our High Reliability Space Relays Department experts are cross-trained within their respective cells to achieve maximum quality and consistency. In addition, team and SPC training utilizing ISO 9000 concepts is given regularly.



Applications

- **Space satellites (telecommunications)**
- **Weather tracking**
- **Surveillance**
- **Infrared observation instrumentation**
- **Missile systems**
- **Torpedo guidance circuits**

CII High Reliability Space Relays customers include ITT's HIRS/3 and AVHRR/3 instruments designed for the Polar Orbiting Environmental Satellite (POES) and McDonnell Douglas's Delta Launch II and III Vehicles.



Engineering Notes

