

Series 795 General Information

High Reliability Space Flight Applications

SERIES 795 Space Flight Information

Is the Series 795 qualified and approved for space flight?

The Series 795 connector is an RF/microwave version of the space-approved Series 791 connector.

Do Series 795 connectors meet outgassing requirements?

Connectors must be vacuum baked to guarantee compliance with outgassing limits established by NASA and military space programs. The requirements are 1.0 % Total Mass Loss (TML) and 0.1% Collected Volatile Condensable Material (CVCM). ASTM E595 defines the test procedure.

What is vacuum bakeout?

Connectors are placed in a special oven for 24 hours at +125°C and a vacuum of 10⁻⁶ Torr.

Are Series 795 connectors non-magnetic?

Series 795 connectors meet the 2.0µ magnetic permeability requirement of EIA-364-54. Additional residual magnetism screening is available on request.

Series 795 connectors are available with upgraded screening and vacuum bakeout for high reliability space programs. Find the appropriate code from the following table and add the code to the part number.

Example
795-001SBMB1-4ML-429C

SPACE GRADE MODIFICATION CODES

| Modification Code | NASA Screening Level | | Vacuum Bakeout 24 hours +125 °C |
|-------------------|--------------------------------|-----------------------------|---------------------------------------|
| | Level 1 Highest Reliability | Level 2 High Reliability | |
| -429 | | ● | |
| -429A | | ● | ● |
| -429B | ● | | |
| -429C | ● | | ● |
| -186M | | | ● |

NASA Screening Requirements (EEE-INST-002 Table 2C)

| Inspection/Test | NASA Screening Level | |
|--|-----------------------------------|-----------------------------------|
| | Level 1 Highest Reliability | Level 2 High Reliability |
| Visual Inspection | 100% 10X magnification | 100% 10X magnification |
| Mechanical Inspection | 2 connectors 10X magnification | 2 connectors 10X magnification |
| DWV/IR | 2 connectors | 2 connectors |
| Contact Separation Force (non-removable contacts) | 2 connectors | Not required |
| Mating and Unmating Force | 2 connectors | Not required |
| Hermeticity (hermetic connectors only) | 100% | 100% |
| Vacuum Bakeout (Optional, depends on Mod code) | 100% | 100% |

SERIES 795 MULTI-PIN RF CONNECTORS