CTF-10G-1

PDS - 242-1

Amphenol Aerospace adds CTF-10G-1 to the CTF (Copper to Fiber) Media Converter Product Family. This product line is rugged, flexible, and affordable with many options available.

CTF-10G-1 is an integrated hybrid connector and media converter that couples high speed copper technology with M29504 fiber technology. Now you can transfer high speed data seamlessly from copper to fiber and fiber to copper.

FEATURES:

- D38999 Shell Size 11
- 10.3125 Gbps
- XAUI interface
- Built-in Test
- 12 dB worst case between transmit power and receive sensitivity
- Up to 10G Ethernet, 8G Fibre Channel, PCI-Express 3.0, DVI and more

RUGGEDIZATION:

- Industry standard rugged transmitters and receivers -40˚C to +85˚C
- Qualified for Airborne and Ground Vehicles
- Refer to page 2 for additional details

FIBER INTERFACE:

- Uses M29504/5 Fiber Termini

COPPER INTERFACE:

- Samtec EQDP Series

FLEXIBILITY:

- Options for ARINC-801, MT, PC Tail Copper and more

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AMPHENOL INTEGRATED ELECTRONIC PRODUCTS RUGGEDIZATION DESIGN

OVERVIEW

Amphenol integrated electronic products are designed and manufactured to our Ruggedization guidelines listed below. These guidelines ensure years of reliable operation in harsh environment applications where extreme operating temperatures, shock, vibration and corrosive atmospheres are regularly experienced.

TEMPERATURE:

- Operating Temperature- Thermal Cycles between -40ºC and 85ºC while device is operating
- Temperature is measured at chassis housing or card edge
- Storage Tempterature- Thermal Cycles between -55ºC and 125ºC

HUMIDITY:

- Operating Humidity- Humidity cycle between 0-100% non-condensing humidity while device operating
- Storage Humidity- Humidity cycle between 0-100% condensing humidity

SEALING:

- Sealing can be optionally provided at the MIL-DTL-38999 interface with up to 10-5 cc/sec performance

FLUIDS SUSEPTIBILITY:

- MIL-DTL-38999 receptacle interface per EIA-364-10E

VIBRATION & SHOCK:

- Sine Vibration - 10g Peak, 5-2,000Hz

  Based on a sine sweep duration of 10 minutes per axis in each of three mutually perpendicular axes. May be displacement limited from 5 to 44 Hz, depending on specific test.
- Random Vibration - 0.0005 @ 5Hz, 0.1 @ 15 Hz, 0.1 @ 2,000 Hz

  60 minutes per axis, in each of three mutually perendicular axes.
- 40 G Peak Shock Cycle

  Three hits in each axis, both directions, ½ sine and terminal-peak saw tooth, Total 36 hits.

ALTITUDE:

- -1,500 to 60,000 ft Altitude Testing w/ Rapid Depressurization

ELECTROMAGNETIC COMPATIBILITY:

- Designed to comply with MIL-STD-461E

PRINTED CIRCUIT BOARD ASSEMBLIES:

- Conformal Coat

  Amphenol performs Conformal Coting to both sides of printed circuit board assemblies using HUSMISEAL IB31 in accordance with IPC-610, Class 3.
- Printed Circuit Board Rigidity

  Amphenol printed circuit boards are fabricated in accordance with IPC-6012, Class 3.
- Printed Circuit Board Fabrication

  Amphenol printed circuit boards acceptance criteria is in accordance with IPC-610, Class 3.

RELIABILITY PREDICTIONS (MTBF):

Amphenol can perform Mean Time Between Failure (MTBF) reliability analysis in full compliance with MIL-HDBK-217F-1 Parts Count Prediction and MIL-HDBK-217F-1 Parts Stress Analysis Prediction. We can also perform reliability analyses in full compliance of ANSI/VITA 51.1 if it is required or preferred over the later method.

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