

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

FIBER INTERFACE:

- Uses M29504/5 Fiber Termini

COPPER INTERFACE:

- Samtec EQDP Series

FLEXIBILITY:

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

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

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 perpendicular 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 Coating 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.

Notice: Specifications are subject to change without notice. Contact your nearest Amphenol Corporation Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all connectors.

AMPHENOL is a registered trademark of Amphenol Corporation. ©2021 Amphenol Corporation REV:6/3/2021