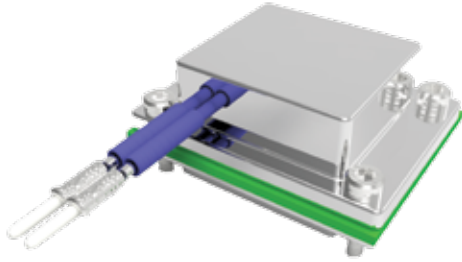


## Amphenol CTF-MEZZ-10G-1



### FEATURES AND BENEFITS

- + 1 Channel (1 Tx, 1 Rx)
- + Small Form Factor - Mezzanine card
- + 10.3125 Gbps
- + Built-in test
- + 12 dB worst case between transmit power and receive
- + Up to 10G Ethernet, 8G Fibre Channel, PCI-Express 3.0, DVI and more

### FIBER INTERFACE

- + M29504 Termini - Bring fiber easily to your D38999 receptacle

### BOARD LEVEL COPPER INTERFACE

- + Samtec Edge Rate™ rugged connector for signal and power (Consult factory for other options)

### POWER SPECIFICATIONS

- + 5V power connection via Samtec Edge Rate™
- + Less than 5 watts power consumption

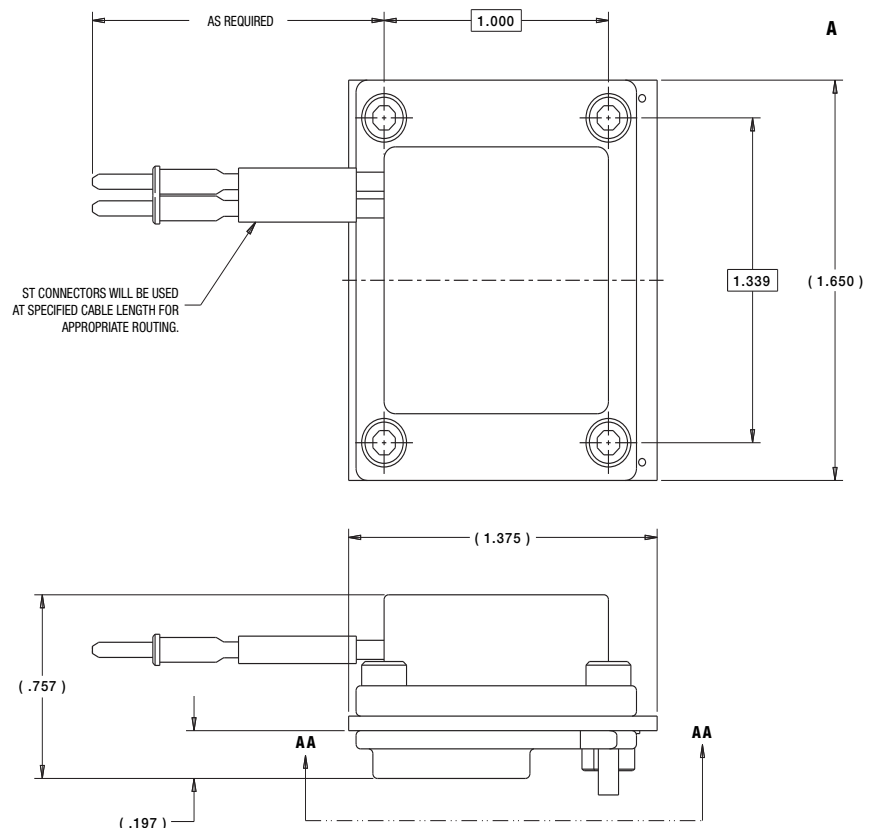
### RUGGEDIZATION

- + Natural convection cooled (no fan)
- + Operational temperature -40°C to +85°C
- + Integrated Frame/Heatsink

### OVERVIEW

Amphenol Aerospace adds the CTF-MEZZ-10G-1 to the CTF (Copper to Fiber) Integrated Electronic Products Family. This product line is rugged, flexible, and affordable with many configuration options available.

CTF-MEZZ-10G-1 is an integrated 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. Integrate easily with your front panel, back panel, or daughtercard.



### CONTACT US:

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Phone: 607-643-1845

## Ordering Guide

Ordering procedure is shown below using part number CTF-

1. 2. 3. 4.

| Connector Type | Material | Copper Interface | Finish |
|----------------|----------|------------------|--------|
| CTF            |          |                  |        |

### Step 1. Connector Type

|            | Designates         |
|------------|--------------------|
| <b>CTF</b> | CTF Product Family |

### Step 2. Select a Material

|           | Designates            |
|-----------|-----------------------|
| <b>-5</b> | Aluminum Shell        |
| <b>-6</b> | Composite Shell       |
| <b>-8</b> | Stainless Steel Shell |

### Step 3. Select a Copper Interface

|          | Designates                  |
|----------|-----------------------------|
| <b>S</b> | Samtec Edge Rate™ Connector |

### Step 4. Select a Finish

|          | Designates                              |
|----------|-----------------------------------------|
| <b>T</b> | Aluminum Durmalon                       |
| <b>Z</b> | Aluminum Black Zinc Nickel              |
| <b>F</b> | Aluminum Electroless Nickel             |
| <b>M</b> | Composite Electroless Nickel            |
| <b>W</b> | Aluminum OD Cad                         |
| <b>J</b> | Composite OD Cad                        |
| <b>L</b> | Stainless Steel Electrodeposited Nickel |
| <b>Y</b> | Stainless Steel Passivated              |



### Available Test Equipment

|                   | Part Number   | Description                                    |
|-------------------|---------------|------------------------------------------------|
| <b>Test Cable</b> | CF-980062-019 | LC Fiber Optic Test Cable for D38999 Connector |
| <b>Test Board</b> | CF-980062-016 | SMA Test Board for Samtec Connector            |

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## 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 is 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 Susceptibility

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

## Vibration & Shock

- Sine Vibration – 10 g 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 - 0.005@5Hz, 0.1@15Hz, 0.1@2,000Hz
  - 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 HUMISEAL 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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