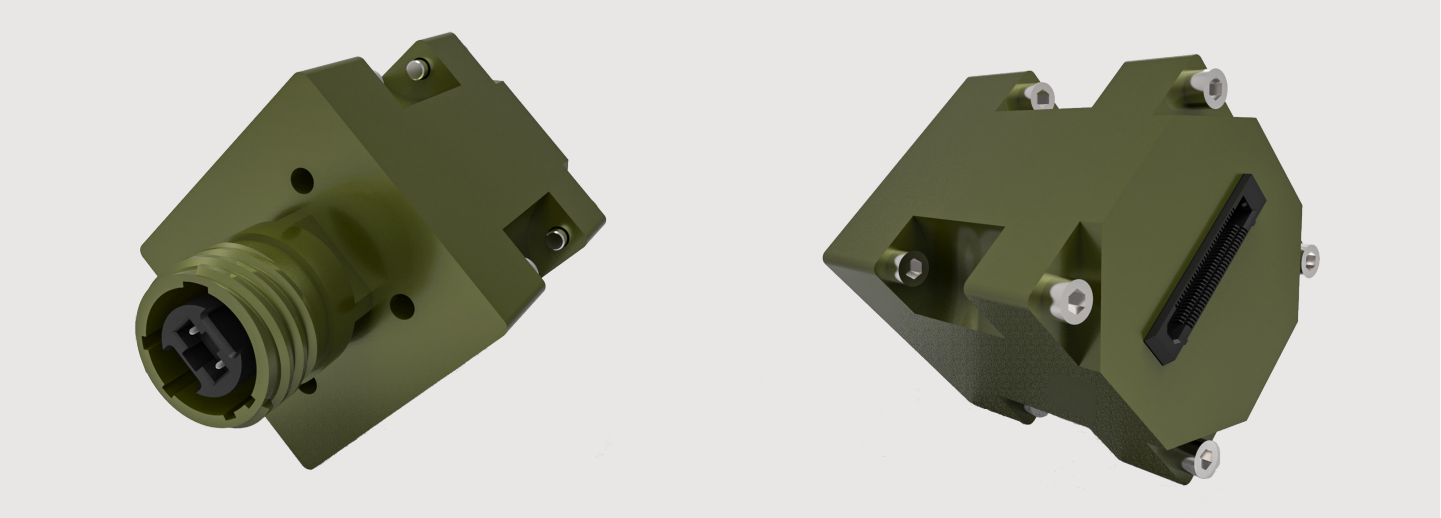
AMPHENOL CTF-4G-12TXRX

PDS - 259



Amphenol Aerospace offers the CTF-4G-12TXRX Converter as part of the Integrated Electronic Products Family. This product combines 4.25Gbps speed with 12 channels of receive or transmit electrical/optical conversion.

The CTF-4G-12TXRX provides high speeds and multiple channels in a small package, that offers great flexibility for handling any type of data.

FEATURES & BENEFITS:

- 12 Tx Fiber, 12 Rx Fiber (Configurable)
- 12 Channel Electrical/Optical Conversion
- Ultra-Small Form Factor

POWER SPECIFICATIONS:

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

FIBER INTERFACE:

- D389999 Shell Size 11
- Single 24 channel MT Fiber optic termini (configurables)

COPPER INTERFACE:

- Samtec Edge RateTM rugged connector for signal and power
- (Consult factory for other options)

RUGGEDIZATION:

- Natural convection cooled (no fan or cold plate required)
- Operational temperature -40°C to +85°C
- Storage temperature -50°C to +125°C
- EMI/EMC compatible
- Refer to page 4 for additional details

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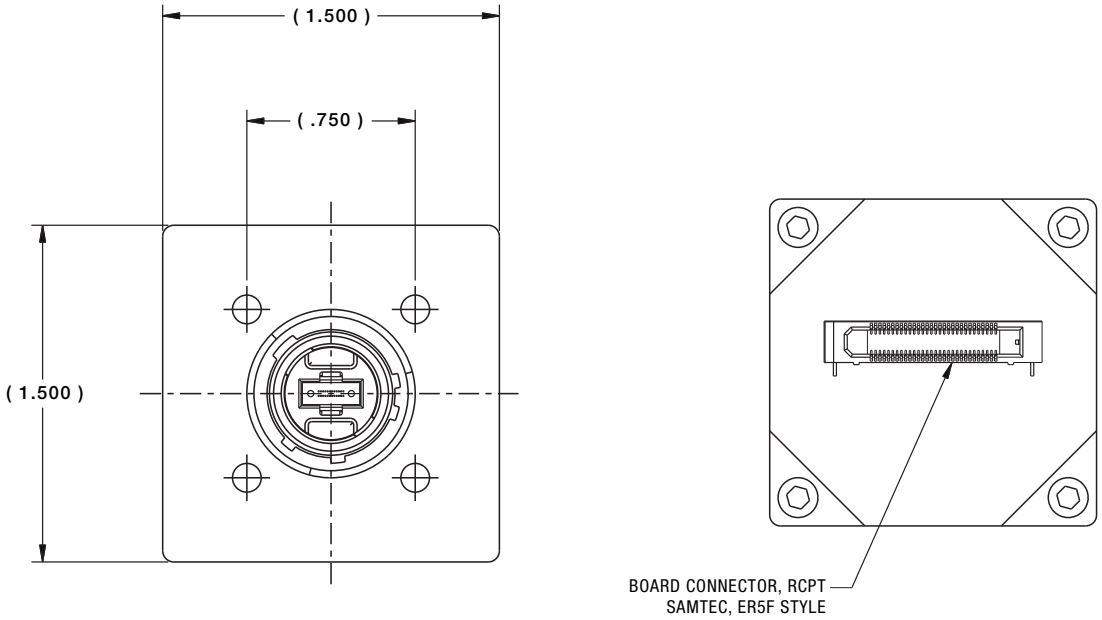
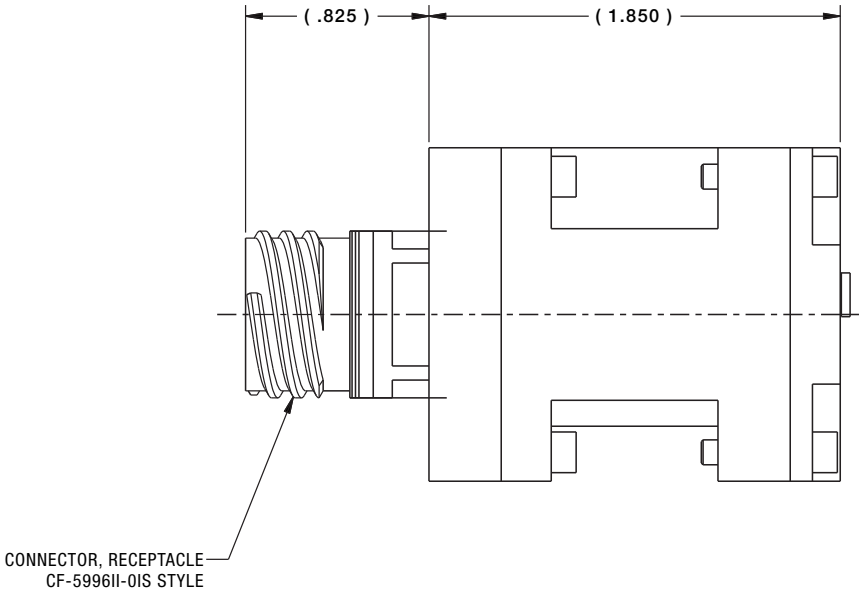
AMPHENOL CTF-4G-12TXRX DRAWING





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AMPHENOL CTF-4G-12TXRX ORDERING GUIDE

Complete steps 1-7 to create your part number

1.	2.	3.	4.	5.	6.	7.
Connector Type	Material	Copper Interface	Finish	Shell Style	D38999 Connector Rotation	Alternate Positions
CTF						

STEP 1 :
Choose a Connector Type

Connector Type	
CTF	CTF Product Family

STEP 2 :
Choose a Material

Material	
-5	Aluminim Shell
-6	Composite Shell
-8	Stainless Shell

STEP 3 :
Choose a Copper Interface

Copper Interface	
S	Samtec Edge Rate™ Connector

STEP 4 :
Choose a Finish

Finish	
T	Aluminum Durmalon
Z	Aluminum Black Zinc Nickel
F	Aluminum Electroless Nickel
M	Composite Electroless Nickel
W	Aluminum OD Cad
J	Composite OD Cad
L	Stainless Steel Electrodeposited Nickel
Y	Stainless Steel Passivated

STEP 5 :
Choose a Shell Style

Shell Style	
0	Wall Mount

STEP 6 :
Choose a Rotation for D38999 Connector (IAW MIL-DTL-38999)

Rotation for D38999 Connector	
N	N
A	A
B	B
C	C
D	D

STEP 7 :
Choose an Alternate Position

Alternate Positions	
W	0°
X	90°
Y	180°
Z	270°

Available Test Equipment

	Part Number	Description
Test Cable	CF-980062-022	LC Fiber Optic Test Cable for D38999 Connector
Test Board	CF-980062-023	SMA Test Board for Samtec Connector

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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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