# **CFP4 Series Connector** Product Specification S6099C Rev 1.0

Now you're connected!



# **Overview**

This short form Product Specification defines the general use and performance parameters for Amphenol's CFP4 series connector.

The interconnect system comprises a 56 position 0.6 mm pitch connector designed to be compatible with the 100G Form factor Pluggable (CFP) Multi-source Agreement.

# Usage

The connector system is capable of data rates up to 25 Gbps per channel (up to 4 channels) with resonance dampening for improved signal integrity (56 position connector).

# Applications

Intended for use in high speed serial interconnect applications such as:

- Clusters
- Servers
- Storage devices

# **General Requirements**

Connectors are tape and reel packaged for robotic pick-and-place.

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QSFP+





THRU THE BEZEL CAGE ASSEMBLY WITH HEAT SINK



1x3 BEHIND THE BEZEL CAGE ASSEMBLY WITH HEAT SINK AND LIGHT PIPES



Revision Date: January 12, 2015

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# Now you're connected!

#### About Amphenol Commercial Products

Amphenol's commercial connector products are used in a variety of end user applications including networking, telecom, server & computer, storage & HDD, consumer electronics and entertainment, professional audio & Industrial & Military/Aerospace.

#### **Related Products**



38 POSITION CONNECTOR



THRU THE BEZEL CAGE ASSEMBLY WITH HEAT SINK



1x3 BEHIND THE BEZEL CAGE ASSEMBLY WITH HEAT SINK AND LIGHT PIPES

СХР



CAGE AND CONNECTOR ASSEMBLY WITH ROUND PIN HEAT SINK AND ELASTOMER GASKET

# **Connector Electrical Characteristics**

Operating Voltage: 3.3V Operating Current: 1.87A

# **Connector Mechanical Characteristics**

Maximum Insertion Force (without heat sink): 60 N Maximum Withdrawal Force (without heat sink): 50 N Durability: 200 mating cycles

# Material Requirements

Unless otherwise specified, the materials for each component shall be:

- Contacts
  - o Base material Phosphor Bronze
  - Contact Normal Force 50g nominal
  - o Plating
    - Mating area 15 or 30 microinches (0.38 or 0.76 μm) min Gold over 50 μin (1.27 μm) min Nickel
    - Solder tails 100 microinches (2.54 μm) min Matte Tin, over 50 μin (1.27 μm) min Nickel
- Housings: Black color, glass-reinforced, lead-free solder reflow process compatible thermoplastic, UL94V-0 rated
- Resonance dampening feature: Conductive polymer.

Temperature rise: Meets the requirement of  $30^{\circ}$  C  $\Delta$ T Operating and storage temperature:  $-40^{\circ}$  to  $+85^{\circ}$  C

# **Process Characteristics**

Connectors are tape and reel packaged Cages offered in various options (refer to S6098C) Maximum process temperature during soldering is 260°C for 10 seconds Belly-to-belly placement possible, allowing for two cages to mount on opposite sides of PCB

# **Resonance Dampening Features**

This connector incorporates a ground commoning device to provide better common mode performance and reduced crosstalk at resonance frequencies.

# Available Documents

Drawing Numbers: P-U99-C056-XXXX CFP4 Series Connector Contact factory or Authorized Amphenol representative for alternate configurations

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