CDC	FCI	PRODUCT SPECIFICATION	GS-12-4	07
TITLE:		VER I/O CONNECTOR ABLE CONNECTOR	PAGE  1 of 7	REV.
			AUTHORIZED BY SINESH	DATE (yy/mm/dd) 2007/01/10

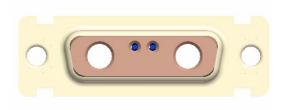
# **48V-FEMALE CABLE CONNECTOR**





**Without Jumper Option** 

**With Shunt Option** 



Connector mating side view.

NOTE: THIS DOCUMENT IS THE PROPERTY OF AND EMBODIES PROPRIETARY INFORMATION OF THE FCI CDC COMPANY. NO PART OF THE INFORMATION SHOWN ON THIS DOCUMENT MAY BE USED IN ANY WAY WITHOUT THE WRITTEN CONSENT OF FCI CDC.

E-3005 04/14/99 K01-R65

CDC	FCJ	PRODUCT SPECIFICATION	GS-12-4	07
TITLE:		VER I/O CONNECTOR ABLE CONNECTOR	PAGE 2 of 7	REV.
			AUTHORIZED BY SINESH	DATE (yy/mm/dd) 2007/01/10

## **CONTENTS**

1. Scope	3
2. Applicable documents	
3. Product description	
3.1 General	3
3.2 Design and construction	3
3.3 Materials and plating	5
3.3.1 Housing dielectric material	5
3.3.2 Terminal material	5
3.3.3 Terminal Plating	5
3.3.4 Shell material	5
3.3.5 Shell Plating	5
4. Characteristics & Test schedule	5
4.1 Characteristics	5
4.1.1 Environmental Characteristics	5
4.1.2 Electrical Characteristics	5
4.1.3 Mechanical Characteristics	6
4.2 Test schedule	6
5. Packaging	6
6 Revision record	

CDC	FCI	PRODUCT SPECIFICATION	GS-12-4	07
TITLE:			3 of 7	REV.
			SINESH	DATE (yy/mm/dd) 2007/01/10

## 1. Scope

This Product specification covers the requirements of a **Micro-TCA Telecom Customers** & FCI D-SUB requirements.

## 2. Applicable documents

Refer GS-12-406 (Product specification of PCB MALE CONNECTOR)

## 3. Product description

#### 3.1 General

PRODUCT LEAD FREE IN ACCORDANCE TO RoHS 2002/EC/95 UL 94 V0 :E118235(R)

This connector is will be on cable side & connected to Male connector mounted on the PCB 48V/24A type.

The connector is with 2 solder Signal contacts & Power contacts will assembled by the customer with cable. Connector is also available with cost saving Jumper option for signal contacts.

#### 3.2 Design and construction

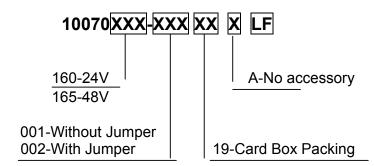
The connector shall be of design, construction and physical dimensions as specified on the applicable product customer drawings :

### **Customer Drawings:**

1) 48V CABLE CONNECTOR

:- 10070165

## **ORDERING INFORMATION**



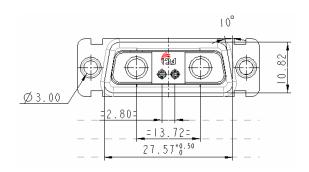
NOTE: THIS DOCUMENT IS THE PROPERTY OF AND EMBODIES PROPRIETARY INFORMATION OF THE FCI CDC COMPANY. NO PART OF THE INFORMATION SHOWN ON THIS DOCUMENT MAY BE USED IN ANY WAY WITHOUT THE WRITTEN CONSENT OF FCI CDC.

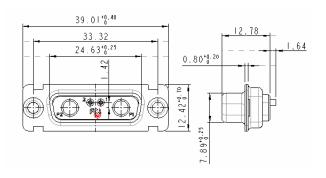
E-3005 04/14/99 K01-R65

CDC	FCI	PRODUCT SPECIFICATION	GS-12-4	07
TITLE:		VER I/O CONNECTOR ABLE CONNECTOR	PAGE 4 of 7	REV.
			AUTHORIZED BY SINESH	DATE (yy/mm/dd) 2007/01/10

## **48V FEMALE CABLE CONNECTOR**

General mating Dimensions





See Customer drawing for more details:-

### 3.3 Materials and plating

### 3.3.1 Housing dielectric material

Plastic raw material: PBT 33% GF, UL94 V-O rating Black co lour

### 3.3.2 Terminal material

Signal Contacts :- Brass

## 3.3.3 Terminal Plating

Signal contact: Au

### 3.3.4 Shell material

Steel

## 3.3.5 Shell Plating

Nickel

NOTE: THIS DOCUMENT IS THE PROPERTY OF AND EMBODIES PROPRIETARY INFORMATION OF THE FCI CDC COMPANY. NO PART OF THE INFORMATION SHOWN ON THIS DOCUMENT MAY BE USED IN ANY WAY WITHOUT THE WRITTEN CONSENT OF FCI CDC.

E-3005 04/14/99 K01-R65

CDC	FCj	PRODUCT SPECIFICATION	GS-12-407	
TITLE:			5 of 7	REV.
			SINESH	DATE (yy/mm/dd) 2007/01/10

## 4. Characteristics & Test schedule

## 4.1 Characteristics

### 4.1.1 Environmental Characteristics

Operating Temperature : 70°; + 30° temperature rise.

> Temperature Range : -50°C to 125 °C

Self Existing capacity of plastics : UL V0
 Damp Heat Steady state : 21 days
 Salt Spray : 48 hours

> Resistance to atmospheric corrosion: Std Requirement for telecom

### 4.1.2 Electrical Characteristics

Max. Current rating

/ contact (IEC 60512-5-2) : 0.375A (Signal contact)

Creepage clearance (IEC-60 664-1) : Between all cts and shells 1.5 except between Signal cts: 0.4.

➤ Insulation voltage (IEC-60512-4-1)

: 1000 Vrms

Contact Resistance (IEC-60512-2-1)

: ≤25 milli Ohms (Power)

Insulation Resistance (IEC-60512-3-1)

:  $5000 \text{ M}\Omega$  initial /  $500 \text{ M}\Omega$  after tests (under 1000 V)

. . . . .

Hot swap
 Yes , but with signal contacts monitoring (first break/last mate)

Engagement under

electrical load : 200 cycles -5V at 0.2A

Connector Contact Touch Safe : The Electrical contacts on the connector shall be Touch safe

With the test finger specified in IEC60950-1

CDC	FCJ	PRODUCT SPECIFICATION	GS-12-407	
TITLE:	MicroTCA POWER I/O CONNECTOR FEMALE CABLE CONNECTOR		PAGE 6 of 7	REV.
			AUTHORIZED BY SINESH	DATE (yy/mm/dd) 2007/01/10

### 4.1.3 Mechanical Characteristics

Mechanical operation : 200 mating cycles (Speed -10mm/sec max.)

➤ Engaging &Separating forces : Maximum Engaging force -100N

: Maximum Separating force -65N

Vibration : 10-500 Hz 50 m/s² 3 x8 x 3 axis 1 μs monitoring

Shock : 300 m/s² 11 ms 1 μs monitoring

Retention Force of connector : The retention mechanism of the Power Module Input Connector

mating interface shall be withstand to 100 N at a 1-minute

duration of straight cable pulling force without any permanent distortion or damage that would impair normal

operation of the Connector.

## 4.2 Test Schedule

For Test schedule & specimen arrangements , refer GS-12-406 (Product specification of Micro TCA PCB Male power connector)

## 6. Packaging

Packing According to GS-14-1104 . The traceability of all parts must be guaranteed by date code on each product.

NOTE: THIS DOCUMENT IS THE PROPERTY OF AND EMBODIES PROPRIETARY INFORMATION OF THE FCI CDC COMPANY. NO PART OF THE INFORMATION SHOWN ON THIS DOCUMENT MAY BE USED IN ANY WAY WITHOUT THE WRITTEN CONSENT OF FCI CDC.

E-3005 04/14/99 K01-R65

CDC	FCI	PRODUCT SPECIFICATION	GS-12-4	07
TITLE:		VER I/O CONNECTOR ABLE CONNECTOR	7 of 7	REV.
			AUTHORIZED BY SINESH	DATE (yy/mm/dd) 2007/01/10

# 7. Revision record

Rev.	Page	Description	ECN	YY/MM/DD
Α	All	Released	107-0006	2007/01/10

NOTE: THIS DOCUMENT IS THE PROPERTY OF AND EMBODIES PROPRIETARY INFORMATION OF THE FCI CDC COMPANY. NO PART OF THE INFORMATION SHOWN ON THIS DOCUMENT MAY BE USED IN ANY WAY WITHOUT THE WRITTEN CONSENT OF FCI CDC.

E-3005 04/14/99 K01-R65