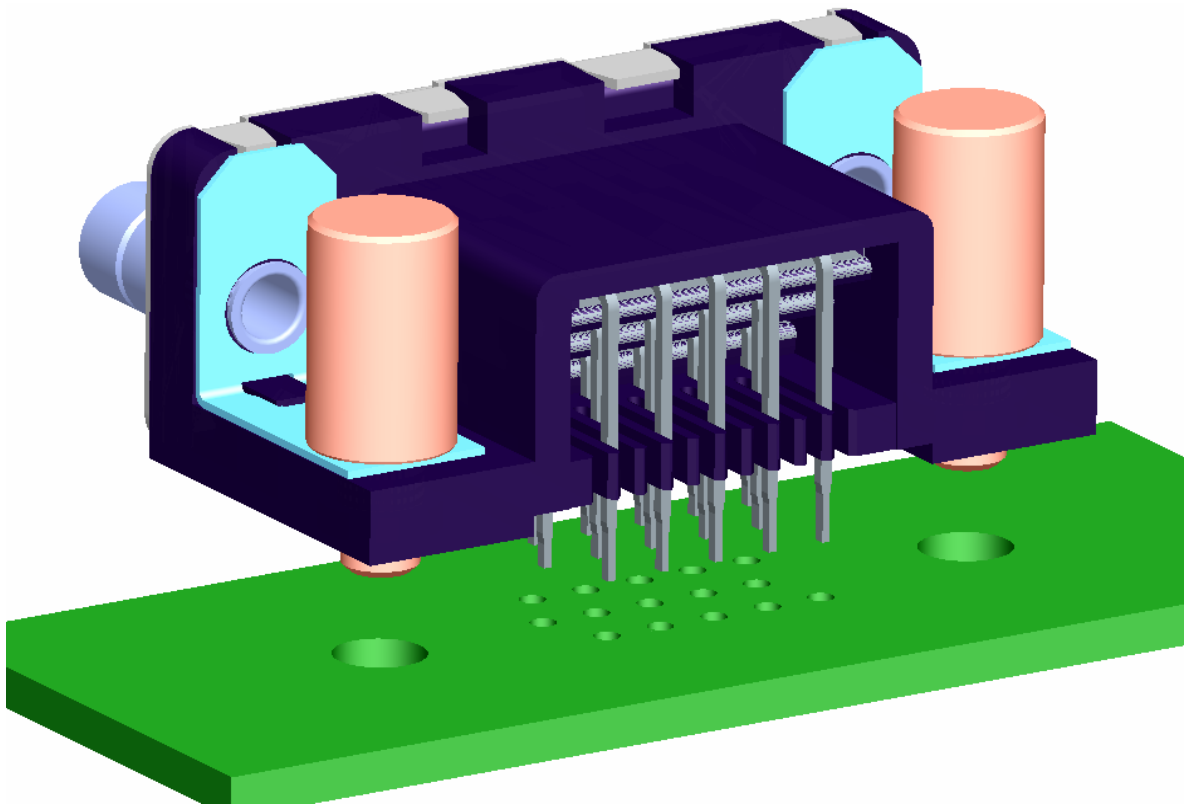



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## COMPACT- D PIP



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## 1.0 OBJECTIVE

This specification defines the performance, test, and reliability requirements of the Compact-D PIP connectors

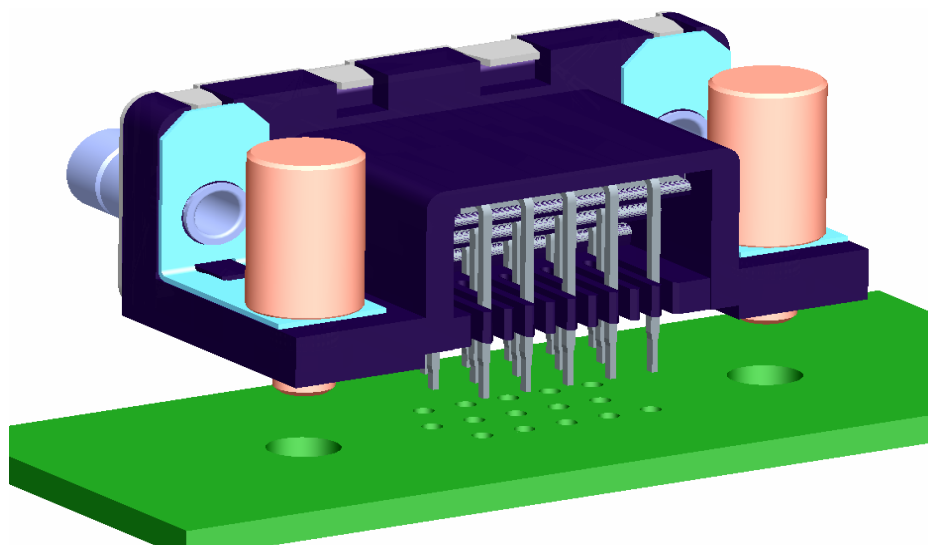
## 2.0 SCOPE

This product specification covers the requirements of a SUB Compact- D PIP Right Angle.  
For Product Pick Process: Hand Placing / Gripper / Vacuum Nozzle

## 3. Product description

### 3.1 General

PRODUCT LEAD FREE IN ACCORDANCE TO RoHS 2002/EC/95




### 3.2 Design and construction

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

#### US STANDARD 14,15,26& 44 POS

**C-CD-0022** FOR THE P/N CD--S13E6RL/RX/RV--LF  
**C-DD-0025** FOR THE P/N CD--S13M6RL/RX/RV—LF

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### **3.3 Materials and plating**

#### **3.3.1 Housing dielectric material**

Plastic raw material: Genestar, 33% glass fiber, UL94 V-O rating  
Black colour

#### **3.3.2 Terminal material**

Copper Alloy CuSn8

#### **3.3.3 Terminal Plating**

Gold over Nickel on mating area metal  
Tin over Nickel on termination

#### **3.3.4 Shell material**

Steel

#### **3.3.5 Shell Plating**

Nickel over Copper

#### **3.3.6 Accessory Material**

Brass


#### **3.3.7 Accessory Plating**

LIF Metal Peg:- Pure Tin over Nickel.  
Female Screw, Insert & Metal Bracket: Nickel Sulfamate.

## **4. Characteristics**

### **4.1 Climatic category**

Performance level	Category Temperature		Damp heat , Steady state		Days
	Lower ° C	Upper ° C	Temp ° C	Rel. Humidity	
1	-55	125	40	93%	56
2	-55	100	40	93%	21

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## 4.2 Electrical Characteristics

### 4.2.1 Voltage proof

Conditions: IES 512-2

Standard atmospheric conditions

Mated connectors

Wiring according to 8.1.5

Contacts/Contacts: 1000 V r.m.s

Contact/Test panel: 1200 V r.m.s

### 4.2.2 Current carrying capacity

Conditions: IES 512-3

Standard atmospheric conditions

Rated current when all contacts are loaded.

Terminations are wired with 0.5mm<sup>2</sup> wire.

### 4.2.3 Initial contact resistance

Conditions: IES 512-2

Standard atmospheric conditions

Mated connectors

Connection points acc. To 8.1.1

Max. Value of contact resistance 25mΩ\*

\* Max. rise 10mΩ in relation to initial values in other tests.

### 4.2.4 Initial insulation resistance

Conditions: IES 512-2

Standard atmospheric conditions

Mated connectors

Test Voltage: 100V±15V d.c

All performance levels : 5 GΩ min.

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## 4.3. Mechanical

### 4.3.1 Mechanical operation

Conditions: IEC 512-5  
Speed: 10mm/s max.  
Rest: 10 s min. (unmated)

Performance level	Operations
1	500
2	200

### 4.3.2 Insertion and withdrawal forces

Conditions: IEC 512-7

Sl.No.	Number of contacts	Insertion and withdrawal force				
		withdrawal			Insertion	
		Min.N	Max.N	Min. 0.3N/Cts. with pin Ø 0.99mm	Max. N	Max. 3.3N/Cts. with pin Ø 0.99mm
1	14/15	3.3	20		30	
2	26	4.5	33		50	
3	44	7.8	56	83		

### 4.3.3 Insert retention in housing (axial)


Conditions: IEC 512-8

Number of contacts	F in N
14/15	53
26	80
44	124

### 4.3.4 Vibration

Conditions: IEC 512-4

Performance level	Severity
1	10Hz to 2000 Hz and 1.5mm or 20g. 3x2.5h
2	10Hz to 500 Hz and 0.35mm or 5g. 3x2h

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#### 4.4 Accessories

Insert M3 or UNC 4-40 : Retention against torque 0.7N.m Min.  
Female screw lock : Retention against torque 0.5N.m Min  
Metal PIP: Retention against force 15N

#### 5. Reflow process

##### Lead free soldering

In accordance with : JSTD\_020C

#### 6. Packaging

In accordance with GS-14-1139 for Tape & Reel Packaging  
In accordance with GS-14-1157 for Tray Packaging

#### 7.Revision record

Rev.	Page	Description	ECN	YY/MM/DD
A	ALL	NEW	109-0040	09/03/14