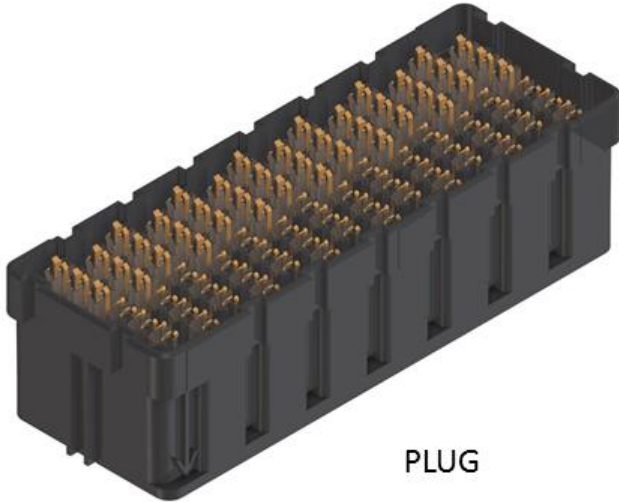
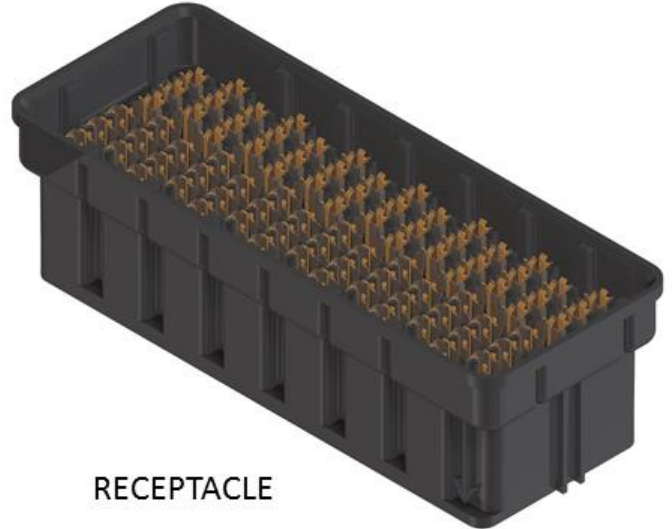


**NEOPRESS**



PLUG



RECEPTACLE

**1.0 SCOPE**

This Product Specification covers the performance requirements and test methods for NeoPress 100 Ohm mezzanine connectors.

**2.0 PRODUCT DESCRIPTION**

**2.1 PRODUCT NAME AND SERIES NUMBER(S)**

NEOPRESS PLUGS: 172801 AND 173363

NEOPRESS RECEPTACLES: 172832 AND 173364

**2.2 AGENCY APPROVAL**

UL FILE E29179 VOL. 10 SEC 3

**3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS**

Refer to the appropriate sales drawings and other sections of this specification for the Necessary referenced documents and specifications.

**3.1 MOLEX DOCUMENTS**

AS-172801-0001

NEOPRESS APPLICATION SPECIFICATION

**3.2 COMMERCIAL STANDARDS**

EIA-364-1000

ELECTRICAL CONNECTOR TEST PROCEDURE

GR-1217-CORE

GENERIC REQUIREMENTS FOR SEPARABLE ELECTRICAL

CONNECTORS USED IN TELECOMMUNICATIONS HARDWARE

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>1 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>

## 4.0 RATINGS

### 4.1 VOLTAGE

30 Volts AC RMS Max

### 4.2 CURRENT

Signal Triad: 1.0 Amps maximum per mated contact pair without grouping restrictions.

Power Triad: 8.0 Amps maximum per mated triad for two adjacent columns of two, four or six triads with each triad in those two columns carrying that same 8.0 Amps maximum. The allowable current for the surrounding Triads is to be determined on a case by case basis

### 4.3 TEMPERATURE

- 55°C to + 85°C

### 4.4 SHELF LIFE

12 Months

### 4.5 STORAGE CONDITION

-40°C to +80°C

### 4.6 CYCLE DURABILITY

100 CYCLES

### 4.7 CONTACT

Mating Pin Length: Signals, 1.2mm Nominal, 1.5mm Maximum (wipe)  
 Grounds, 1.7mm Nominal, 2.0mm Maximum (wipe)

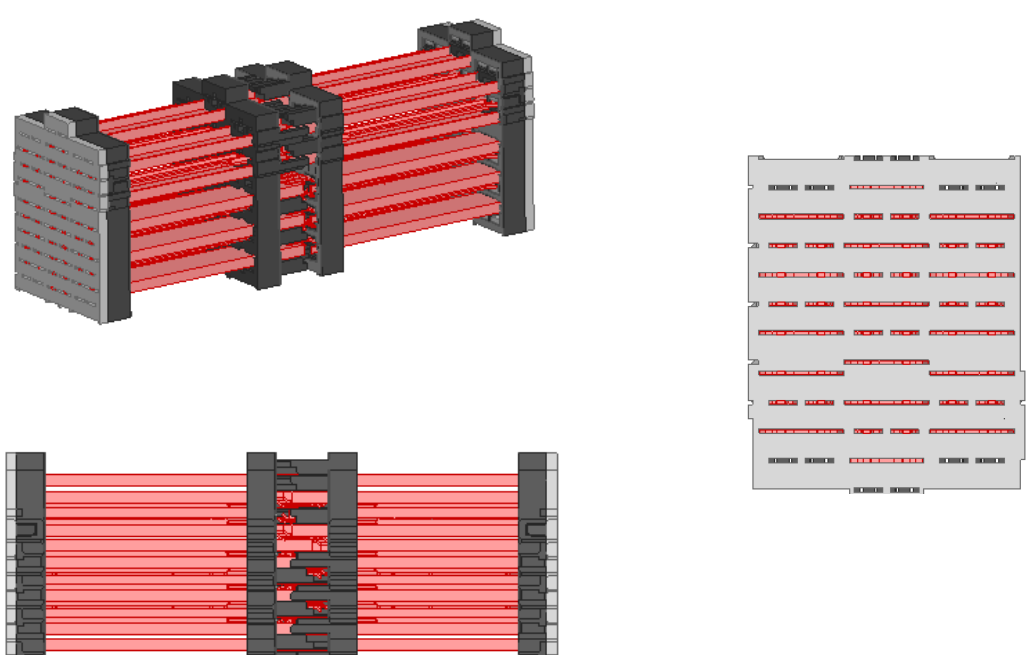
Mating Sequencing: Grounds first, then Signals

Maximum Separation with Effective Mating: 1.5mm

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>2 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>

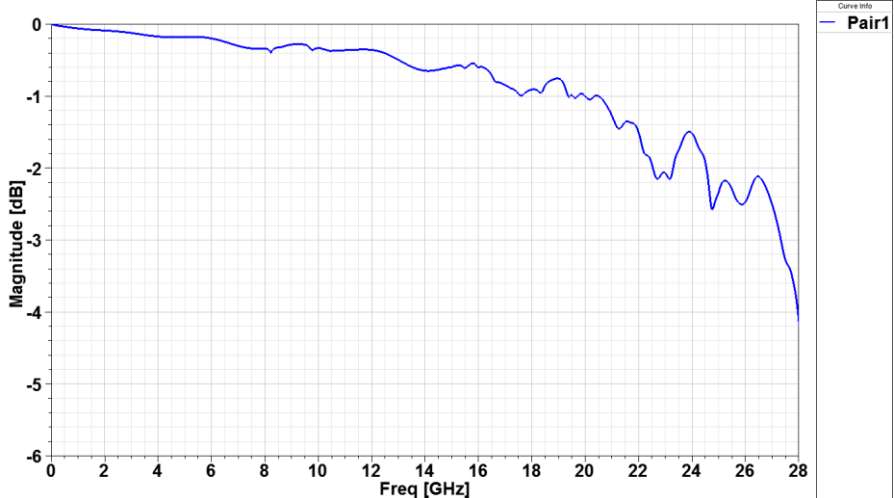
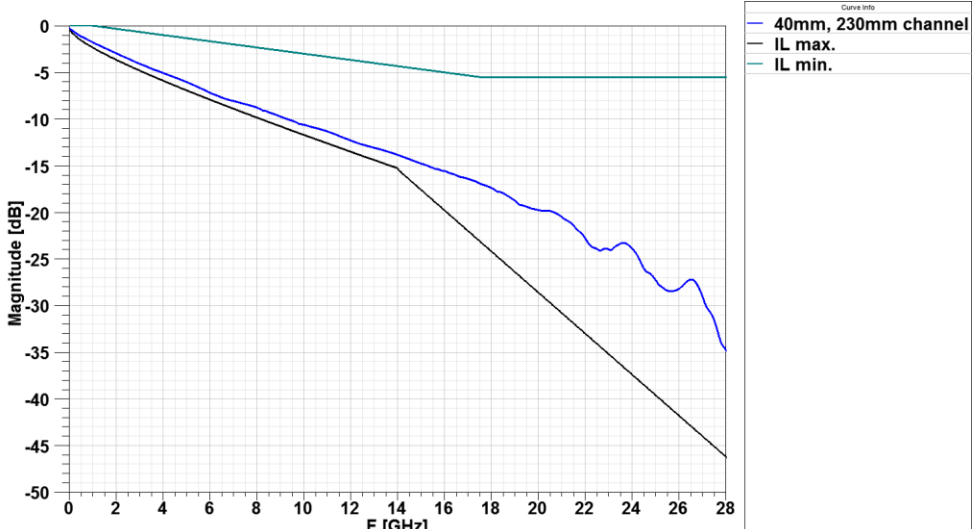
**4.8 SIGNAL INTEGRITY (172801 mated to 172832 = 40mm stack height)**

**A. SIGNAL INTEGRITY REQUIREMENTS (CONNECTOR ONLY)**

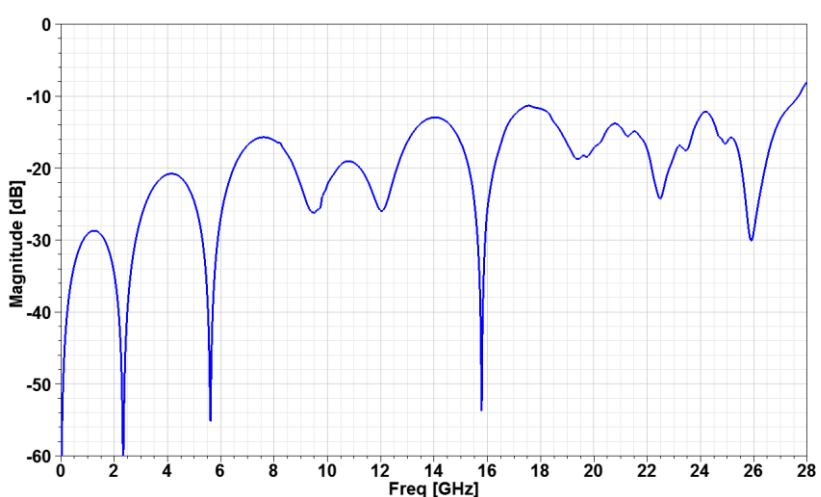
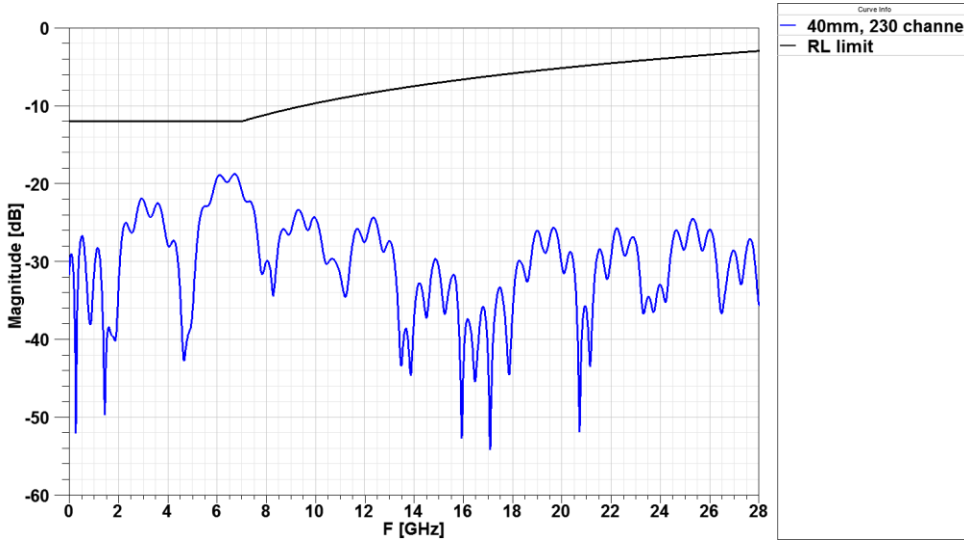
ITEM	TEST	TEST SPECIFICATION	REQUIREMENT	ACTUAL DATA
1	Application Data Rate	OIF CEI-28G-SR	28.05 Gbps	28+ Gbps
	Geometry Description	Connector Only Data: (no channel loss)	For Reference	See Pictures Below
		OIF CEI-28G-SR: Includes connector only model and combined circuit board losses as spec'd in CEI-28G-SR	Up to 300mm of trace	230 mm trace
2				
3	Data Basis	Analytical Field Solutions	For Reference	Connector data has been compared to measured values to ensure validity

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>3 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>

**B. FREQUENCY DOMAIN**

ITEM	DESCRIPTION	TEST SPECIFICATION	REQUIREMENT	ACTUAL DATA
1a	Differential Insertion Loss (SDDyx)	Connector-only	For Reference	See Graph (Connector Only Data)
	 <p style="text-align: center;">All pairs are identical</p>			
1b	Differential Insertion Loss (SDDyx)	OIF CEI-28G-SR	$0.1188 + 1.54 \cdot \sqrt{f} + 0.68 \cdot f$ [dB], for $0.05\text{GHz} \leq f < 14.025\text{GHz}$ $-15.43 + 2.2 \cdot f$ [dB], for $14.025\text{GHz} \leq f \leq 28.05\text{GHz}$	See Graph (Connector + 230mm trace)
				

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>4 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>

ITEM	DESCRIPTION	TEST SPECIFICATION	REQUIREMENT	ACTUAL DATA
2a	Differential Return Loss (SDDxx)	Connector-only	For Reference	See Graph (Connector Only Data)
	 <p style="text-align: center;">All pairs are identical</p>			
2b	Differential Return Loss (SDDxx)	OIF CEI-28G-SR	12 [dB] for $0.05\text{GHz} \leq f < 7.0125\text{GHz}$ $12 - 15 \cdot \text{Log}_{10}(f/7.0125)$ [dB] for $7.0125\text{GHz} \leq f \leq 28.05\text{GHz}$	See Graph (Connector + 230mm trace)
				

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>5 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>

ITEM	DESCRIPTION	TEST SPECIFICATION	REQUIREMENT	ACTUAL DATA
3	Near-End Isolation	Connector Only	For Reference	See graph
4	Far- End Isolation	Connector Only	For Reference	See graph
5	ICN	OIF CEI-28G-SR (230mm trace)	$\sigma_{Tot}$ 6 mV <sub>rms</sub>	2.7 mV <sub>rms</sub> (3 FEXT & 3 NEXT Aggressors)

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>6 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>

ITEM	DESCRIPTION	TEST SPECIFICATION	REQUIREMENT	ACTUAL
6	Through Mode Conversion SDCxy	Connector Only	For Reference	See graph
	<p style="text-align: center;">All pairs are identical</p>			
7	Common Mode Reflections SCCxx	Connector Only	For Reference	See graph
	<p style="text-align: center;">All pairs are identical</p>			

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>7 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>

## C. TIME DOMAIN

ITEM	DESCRIPTION	TEST SPECIFICATION	REQUIREMENT	ACTUAL
1	Differential Impedance	Connector Only, 100-ohms nominal	For Reference at 20ps(10-90%) rise-time	See graph
	<p style="text-align: center;">All pairs are identical</p>			
2	Common Mode Impedance	Connector Only, 25-ohms nominal	For Reference at 20ps(20-80%) rise-time	See graph
	<p style="text-align: center;">All pairs are identical</p>			

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>8 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>





# PRODUCT SPECIFICATION

## 5.0 PERFORMANCE

### 5.1 ELECTRICAL REQUIREMENTS (Reference Telcordia GR-1217-CORE, Issue 2, Dec. 2008)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Contact Resistance	<p><b>Signal Triads</b> Mate connectors: Apply a maximum voltage of <b>20 mV</b> and a current of <b>100 mA</b>. Per EIA-364-23</p> <p><b>Power Triads</b> Mate connectors: Apply a Current of <b>4.00 Amperes</b>, measure the voltage and calculate the Resistance.</p>	<p><b>30 milliohms</b> Max [initial]</p>
2	Insulation Resistance	Connector is not to be mated, or mounted (Not soldered to a PCB): apply a voltage of <b>100 VDC</b> between adjacent shield terminals. Per EIA-364-21	<p><b>1000 Megohms</b> Min Shield/Shield (Between adjacent Triads) &amp;  <b>1000 Megohms</b> Min Signal/Shield (Within a Triad) &amp;  <b>1000 Megohms</b> Min Signal/Signal (Within a Triad)</p>
3	Dielectric Withstanding Voltage	Connector is not to be mated, or mounted (Not soldered to a PCB): Apply the specified voltage for <b>1 minute</b> between the specified terminals. Per EIA-364-20	<p><b>200 Vac RMS</b> Shield/Shield (Between adjacent Triads) &amp;  <b>60 Vac RMS</b> Signal/Shield (Within a Triad) &amp;  <b>60 Vac RMS</b> Signal/Signal (Within a Triad)</p> <p>No breakdown; current leakage &lt; <b>5 mA</b></p>
4	Signal Continuity	Mated per EIA-364-87	No interrupts greater than <b>10 nanoseconds</b>

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: <b>172406</b> DATE: <b>2018/02/15</b>	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>9 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>



# PRODUCT SPECIFICATION

## 5.2 MECHANICAL REQUIREMENTS (Ref. Telcordia GR-1217-CORE, Issue 2, Dec. 2008)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
6	<b>Connector Mate and Un-mate Forces</b>	Mate and un-mate connector (Plug to Receptacle) at a rate of $25 \pm 6$ mm per minute. Per EIA-364-13	<b>2.00 N (0.45 lbf)</b> MAX mating force per Triad & <b>0.64 N (0.14 lbf)</b> MIN un-mating force per Triad
7	<b>Triad Retention Force (in Housing)</b>	Axial pullout force on the triad in the housing at a rate of $25 \pm 6$ mm per minute. Per EIA-364-13	<b>1.00 N (.225 lbf)</b> MIN retention force per Triad
8	<b>Durability</b>	Mate connectors up to <b>100</b> cycles at a maximum rate of <b>10</b> cycles per minute prior to Environmental Tests. Per EIA-364-09	<b>Signal Triads</b> <b>10</b> milliohms Max [change from initial]  <b>Power Triads</b> Voltage drop: 60 millivolts Max across one column having 6 Triads (12 mated Terminals) [change from initial] & <b>7.5</b> milliohms Max for two mated Terminals @ 4 Amperes [change from initial]
9	<b>Vibration (Random)</b>	Mate connectors. Vibrate 20-500Hz Random, 3.1g's, 15minutes, 3 axes. Per EIA 364-28, test condition VII, condition D	<b>Signal Triads</b> <b>10</b> milliohms Max [change from initial] & Discontinuity < 1 microsecond  <b>Power Triads</b> Voltage drop: 60 millivolts Max across one column having 6 Triads (12 mated Terminals) [change from initial] & <b>7.5</b> milliohms Max for two mated Terminals @ 4 Amperes [change from initial] & Discontinuity < 1 microsecond

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>10 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>

## 5.2 MECHANICAL REQUIREMENTS (Continued)

10	<b>Shock (Mechanical)</b>	Mate connectors. Shock at <b>30 g's</b> with ½ sine wave (11 milliseconds) shocks in the ±X, ±Y & ±Z axes ( <b>18 shocks total</b> ). Per EIA-364-27, test condition VII, condition H	<p><b>Signal Triads</b>  <b>10 milliohms Max</b>                      [change from initial]                      &amp;                      Discontinuity &lt; <b>1 microsecond</b></p> <p><b>Power Triads</b>                      Voltage drop: <b>60 millivolts Max</b>                      across one column having 6 Triads (12 mated Terminals)                      [change from initial]                      &amp;  <b>7.5 milliohms Max</b> for two mated Terminals @ 4 Amperes                      [change from initial]                      &amp;                      Discontinuity &lt; <b>1 microsecond</b></p>
11	<b>Contact Normal Force</b>	Deflect Receptacle contacts to 0.35mm (At a rate of 2.54mm +/- 0.20mm per minute). Measure the reaction force at an angle that is parallel to the surface normal of the contact surface of the mating Plug Triad that would normally be present. Per EIA-364-04.	<p><b>0.80 N Min</b> (Shield Contact)                      &amp;  <b>0.40 N Min</b> (Signal Contact)                      or  <b>0.40 N Min</b> (B+ Contact)</p>
12	<b>Temperature Rise (Power Triads Only)</b>	Mate connectors: Apply a current of 4 Amperes to both terminals (B+ and shield) in each of the Triads in two adjacent columns (Both columns having six adjacent Triads so powered).	<p>Temperature rise:  <b>+30°C MAXIMUM</b>                      Measure the temperature rise after the temperature stabilizes</p>

REVISION:  <b>D</b>	ECR/ECN INFORMATION: EC No: <b>172406</b> DATE: <b>2018/02/15</b>	TITLE:  <h2 style="text-align: center;">PRODUCT SPECIFICATION</h2> <h3 style="text-align: center;">100 OHM NEOPRESS CONNECTORS</h3>		SHEET No.  <b>11 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>		CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>

### 5.3 ENVIRONMENTAL REQUIREMENTS (Ref Telcordia GR-1217-CORE, Issue 2, Dec. 2008)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
13	Thermal Shock	Mate connectors. Expose to <b>10</b> cycles: <b>-55°C to 85°C</b> . Per EIA 364-32, Test Condition 1.	<p><b>Signal Triads</b>  <b>10</b> milliohms Max                      [change from initial]                      &amp;                      Visual: No Damage</p> <p><b>Power Triads</b>                      Voltage drop: 60 millivolts Max across one column having 6 Triads (12 mated Terminals)                      [change from initial]                      &amp;  <b>7.5</b> milliohms Max for two mated Terminals @ 4 Amperes                      [change from initial]                      &amp;                      Visual: No Damage</p>
14	Temperature Life (mated)	Mate connectors. Expose to: <b>240</b> hours at <b>105 ± 2°C</b> . Per EIA 364-17.	<p><b>Signal Triads</b>  <b>10</b> milliohms Max                      [change from initial]                      &amp;                      Visual: No Damage</p> <p><b>Power Triads</b>                      Voltage drop: 60 millivolts Max across one column having 6 Triads (12 mated Terminals)                      [change from initial]                      &amp;  <b>7.5</b> milliohms Max for two mated Terminals @ 4 Amperes                      [change from initial]                      &amp;                      Visual: No Damage</p>

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>12 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>

## 5.3 ENVIRONMENTAL REQUIREMENTS (Continued)

15	<p><b>Cyclic Humidity (mated)</b></p>	<p>Mate connectors: Cycle per EIA-364-31, method III: <b>24</b> cycles at temperature <b>25 ± 3°C</b> at <b>80 ± 5%</b> relative humidity and <b>65 ± 3°C</b> at <b>50 ± 5%</b> relative humidity; dwell time of <b>1.0</b> hour; ramp time of <b>0.5</b> hours.</p> <p>{Note: Remove surface moisture and air dry for <b>1</b> hour prior to measurements.}</p>	<p><b>Signal Triads</b>  <b>10</b> milliohms Max                      [change from initial]</p> <p><b>Power Triads</b>                      Voltage drop: 60 millivolts Max across one column having 6 Triads (12 mated Terminals)                      [change from initial]                      &amp;  <b>7.5</b> milliohms Max for two mated Terminals @ 4 Amperes                      [change from initial]</p>
16	<p><b>Thermal Disturbance</b></p>	<p>Cycle the connector between <b>15° ± 3°C</b> and <b>85° ± 3°C</b> as measured on the connector contacts. Ramps should be a minimum of <b>2°C</b> per minute, and dwell times should insure that the contacts reach these temperature extremes (a minimum of 5 minutes). Humidity is not controlled. Perform 10 cycles on Mated connectors.</p>	<p><b>Signal Triads</b>  <b>10</b> milliohms Max                      [change from initial]</p> <p><b>Power Triads</b>                      Voltage drop: 60 millivolts Max across one column having 6 Triads (12 mated Terminals)                      [change from initial]                      &amp;  <b>7.5</b> milliohms Max for two mated Terminals @ 4 Amperes                      [change from initial]</p>
17	<p><b>Dust</b></p>	<p>Connector not mated. Use benign dust. Per EIA 364-91.</p>	<p><b>Signal Triads</b>  <b>10</b> milliohms Max                      [change from initial]</p> <p><b>Power Triads</b>                      Voltage drop: 60 millivolts Max across one column having 6 Triads (12 mated Terminals)                      [change from initial]                      &amp;  <b>7.5</b> milliohms Max for two mated Terminals @ 4 Amperes                      [change from initial]</p>

REVISION:  <b>D</b>	ECR/ECN INFORMATION: EC No: <b>172406</b> DATE: <b>2018/02/15</b>	TITLE: <p style="text-align: center;"><b>PRODUCT SPECIFICATION</b>  <b>100 OHM NEOPRESS CONNECTORS</b></p>		SHEET No.  <b>13 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>		CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>

## 5.3 ENVIRONMENTAL REQUIREMENTS (CONTINUED)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
18	MFG 1	7 days Un-mated; 3 days Mated Test per EIA-364-65, method 2A.	<p><b>Signal Triads</b> 10 milliohms Max [change from initial]</p> <p><b>Power Triads</b> Voltage drop: 60 millivolts Max across one column having 6 Triads (12 mated Terminals) [change from initial] &amp; 7.5 milliohms Max for two mated Terminals @ 4 Amperes [change from initial]</p>
19	MFG 2	10 days Un-mated; 4 days Mated Test per EIA-364-65, method 2A.	<p><b>Signal Triads</b> 10 milliohms MAXIMUM [change from initial] Failure Rate <math>\leq</math> 0.1 ppm/contact/KPOH</p> <p><b>Power Triads</b> Voltage drop: 60 millivolts Max across one column having 6 Triads (12 mated Terminals) [change from initial] &amp; 7.5 milliohms Max for two mated Terminals @ 4 Amperes [change from initial]]</p>

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>14 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>

## 6.0 TESTING REQUIREMENTS

### 6.1 TEST SEQUENCE

Follow test sequence used in groups 1 thru 6 as laid out in section 6.4 of this document.

### 6.3 STAND ALONE TESTS

1. Measure the Contact Normal Force of all three Contacts in the Triad.

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>15 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>



# PRODUCT SPECIFICATION

## 6.4 TELECORDIA GR1217-CORE

<u>CONSTRUCTION ANALYSIS**</u>	<u>GROUP 1</u> 100 min contact interfaces within 5 min mated sets	<u>GROUP 2</u> 100 min contact interfaces within 5 min mated sets	<u>GROUP 3**</u> 100 min contact interfaces within 5 min mated sets	<u>GROUP 4*</u> 100 min contact interfaces within 5 min mated sets	<u>GROUP 5*</u> 1000 min contact interfaces within 5 min mated sets	<u>GROUP 6</u> 100 min contact interfaces within 5 min mated sets
Plating Thickness	LLCR	LLCR	Dielectric Withstanding Voltage	LLCR	LLCR	LLCR
Plating Porosity	Durability (20 M/U cycles)	Durability (20 M/U cycles)	Durability (200 M/U cycles)	Durability (20 M/U cycles)	Durability (20 M/U cycles)	Durability (20 M/U cycles)
M/U Force	Temperature Life	Thermal Shock	Thermal Shock	Temperature Life (pre-Cond) 48 hrs @ 125 C)	Temperature Life (pre-Cond) 48 hrs @ 125 C)	Dust
Contact Retention Force	LLCR	LLCR	Cyclic Humidity	LLCR	LLCR	LLCR
Contact Normal Force	Reseating (3 M/U cycles)	Cyclic Humidity	Dielectric Withstanding Voltage	MFG* (7 days Un-mated)	MFG* (10 days Un-mated)	Thermal Disturbance
Contact Wear	LLCR	LLCR		LLCR	LLCR	LLCR
Contact Wipe		Reseating (3 M/U cycles)		MFG (3 days Mated)	MFG (4 days Mated)	Reseating (3 M/U cycles)
		LLCR		LLCR	LLCR	LLCR
				Thermal Disturbance	Thermal Disturbance	
				LLCR	LLCR	
				Reseating (3 M/U cycles)	Reseating (3 M/U cycles)	
				LLCR	LLCR	

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>16 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>



## 6.4 TELECORDIA GR1217-CORE (CONTINUED)

\* Both Plugs and Receptacles are exposed during the un-mated portion of the MFG.

\*\* Connectors are not soldered to PCB's.

\*\*The Insulation Resistance and Dielectric Withstanding Voltage test sequence to be done within 3 Plug Triads and within 3 Receptacle Triads, Signal/Signal and Signal/Shield (3 measurements per Triad). Measurements are to be done on 5 Plugs and 5 Receptacles (90 measurements total).

\*\*The Insulation Resistance and Dielectric Withstanding Voltage test sequence to be assessed between 3 adjacent Plug Triads (Shield/Shield) and between 3 adjacent Receptacle Triads (Shield/Shield). This will yield 3 measurements per Plug and 3 measurements per Receptacle. Measurements are to be done on 5 Plugs and 5 Receptacles (30 measurements total).

\*\*If some Triads slip out of position during durability cycling, then restore those to the initial location by pushing them back in. Do not use adhesives to fix the Triads in place. Alternatively, a fixture may be used to support the Triads during durability cycling to prevent Triads from being dislodged. However, any fixtures must be completely removable, and must not mar the connectors.

## 6.5 TEST MEASURING EQUIPMENT

MEASURING EQUIPMENT INFORMATION USED FOR TESTING			
Description	Manufacturer	Model	Calibration Standard
Accelerometer	PCB Piezotronics	T352C04	Annually
Accelerometer	Dytran	3030B5H	
Accelerometer	Dytran	3035BG	
Micro-Ohmmeter	Keithley	580	
Micro-Ohmmeter	Keithley	580	
Micro-Ohmmeter	Thermotron	580	
MFG Analyzer System	American Ecotech	Serinus 40 Nox	
Ultra Hypot III	Associated Research, Inc.	7650	
Temp Humidity Probe	Vaisala	HMT338	
Analytical Microbalance 52g	Mettler Toledo	HMT338	

REVISION: <b>D</b>	ECR/ECN INFORMATION: EC No: 172406 DATE: 2018/02/15	TITLE: <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	SHEET No. <b>17 of 18</b>
DOCUMENT NUMBER: <b>PS-172801-0001</b>	CREATED / REVISED BY: <b>PREMO</b>	CHECKED BY: <b>PELOZA</b>	APPROVED BY: <b>LANG</b>

## 6.6 STAND ALONE TEST SEQUENCE (POWER TRIADS ONLY)

<b>Temperature Rise &amp; Voltage Drop Test Sequence</b>
Voltage Drop
Durability 20 M/U cycles
Voltage Drop
Temperature Life 105° C, 120 Hrs
Voltage Drop
MFG (10 days Un-mated)
Voltage Drop
MFG (4 days Mated)
Voltage Drop
Thermal Disturbance
Voltage Drop
Powered for 96 Hours (Steady State) Measure Voltage Drop and Temperature Rise Continuously Throughout

<u>REVISION:</u> <b>D</b>	<u>ECR/ECN INFORMATION:</u> EC No: 172406 DATE: 2018/02/15	<u>TITLE:</u> <b>PRODUCT SPECIFICATION 100 OHM NEOPRESS CONNECTORS</b>	<u>SHEET No.</u> <b>18 of 18</b>
<u>DOCUMENT NUMBER:</u> <b>PS-172801-0001</b>		<u>CREATED / REVISED BY:</u> <b>PREMO</b>	<u>CHECKED BY:</u> <b>PELOZA</b>
		<u>APPROVED BY:</u> <b>LANG</b>	