



TEST SUMMARY

SMALL FORM-FACTOR PLUGGABLE (SFP) AND Z-AXIS PLUGGABLE CONNECTOR

1.0 SCOPE

This Product Specification covers the 0.80 mm (.031inch) centerline (pitch) printed circuit board (PCB) connector series with 15 micro-inches gold plating.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBER(S)

<u>Product Name</u>	<u>Series Number</u>
Small Form-factor pluggable	74441
Z -Axis pluggable	74441

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

See the appropriate Sales Drawing (SD-74441-001) for information on dimensions, material, platings and markings.

2.3 SAFETY AGENCY APPROVALS

UL file:	E29179
CSA file:	1310648

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

The SFP product conforms to the Small Form-factor Pluggable (SFP) Multi-source agreement (MSA). The Z-axis pluggable connector (70 circuit) conforms to the Xenpak MSA. The Z-axis pluggable connector (30 circuit) conforms to the XFP MSA.

4.0 QUALIFICATION

Laboratory conditions and sample selection are in accordance with **EIA-364**.

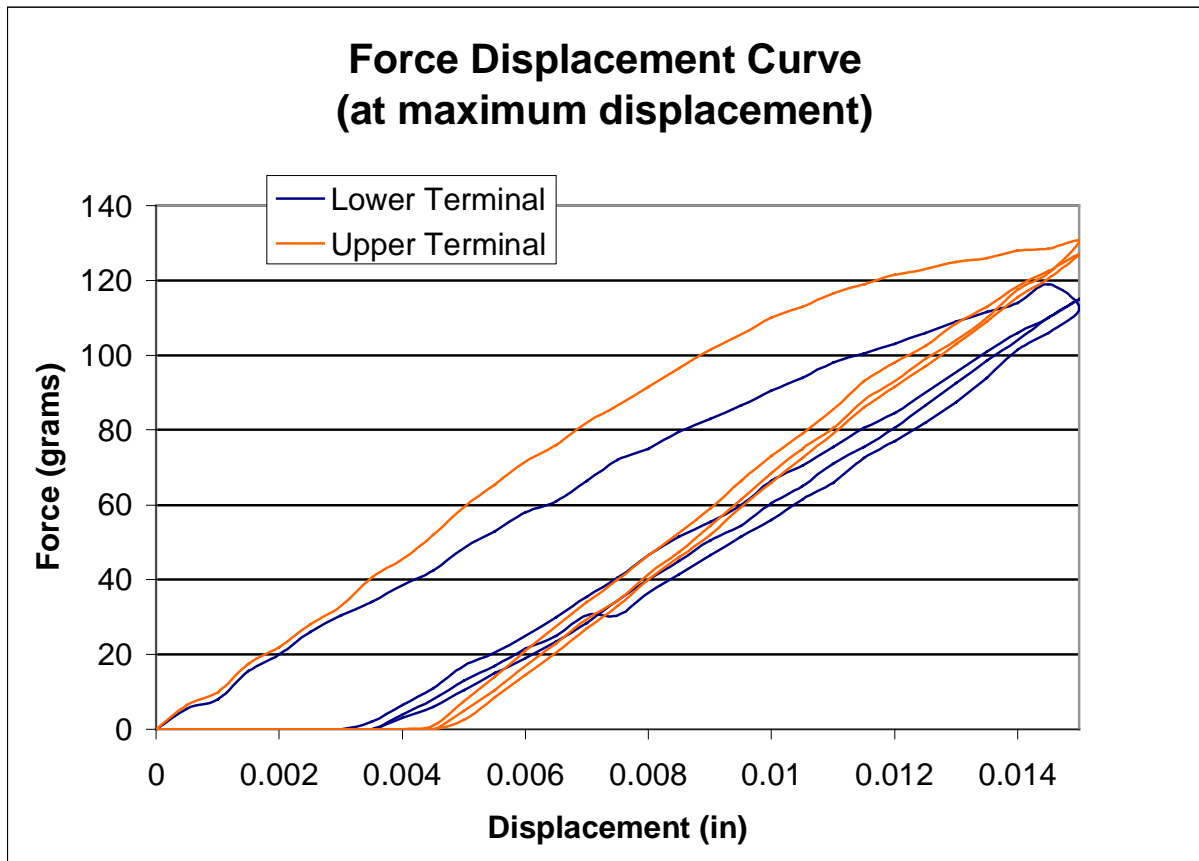
REVISION: A	ECR/ECN INFORMATION: EC No: UCP2003-0715 DATE: 2002 / 10 / 31	TITLE: TEST SUMMARY FOR SMALL FORM-FACTOR AND Z-AXIS PLUGGABLE CONNECTORS	SHEET No. 1 of 5
DOCUMENT NUMBER: TS-74441-002	CREATED / REVISED BY: K. SWEENEY	CHECKED BY: M. BANAKIS	APPROVED BY: M. BANAKIS



TEST SUMMARY

5.0 PERFORMANCE

5.1 NORMAL FORCE



REVISION: A	ECR/ECN INFORMATION: EC No: UCP2003-0715 DATE: 2002 / 10 / 31	TITLE: TEST SUMMARY FOR SMALL FORM-FACTOR AND Z-AXIS PLUGGABLE CONNECTORS	SHEET No. 2 of 5
DOCUMENT NUMBER: TS-74441-002	CREATED / REVISED BY: K. SWEENEY	CHECKED BY: M. BANAKIS	APPROVED BY: M. BANAKIS



TEST SUMMARY

5.2 MECHANICAL TESTING 1 (THERMAL AGING)

ITEM	DESCRIPTION	TREATMENT	REQUIREMENT	MEAN	MINIMUM	MAXIMUM
1	Contact Resistance (Low Level)	4 point dry circuit method	Initial	44.22 mΩ	32.48 mΩ	47.76 mΩ
2	Durability	20 cycles	No Damage	No Visual or Dimensional Change		
3	Contact Resistance (Low Level)	4 point dry circuit method	10 milliohms MAXIMUM*	-0.12 mΩ	-1.20 mΩ	0.84 mΩ
4	Thermal Aging	115 °C for 432 hours per EIA-364-17B Method A	No damage	No visual or Dimensional Change		
5	Contact Resistance (Low Level)	4 point dry circuit method	10 milliohms MAXIMUM*	0.33 mΩ	-0.50 mΩ	3.24 mΩ
6	Reseating		No Damage	No Visual or Dimensional Change		
7	Contact Resistance (Low Level)	4 point dry circuit method	10 milliohms MAXIMUM*	0.33 mΩ	-0.50 mΩ	3.24 mΩ

*Change from initial

REVISION: A	ECR/ECN INFORMATION: EC No: UCP2003-0715 DATE: 2002 / 10 / 31	TITLE: TEST SUMMARY FOR SMALL FORM-FACTOR AND Z-AXIS PLUGGABLE CONNECTORS	SHEET No. 3 of 5
DOCUMENT NUMBER: TS-74441-002	CREATED / REVISED BY: K. SWEENEY	CHECKED BY: M. BANAKIS	APPROVED BY: M. BANAKIS



TEST SUMMARY

5.3 MECHANICAL TESTING 2 (VIBRATION)

ITEM	DESCRIPTION	TREATMENT	REQUIREMENT	MEAN	MINIMUM	MAXIMUM
1	Contact Resistance (Low Level)	4 point dry circuit method	Initial	43.63 mΩ	23.10 mΩ	61.91 mΩ
2	Durability	20 cycles	No Damage	No Visual or Dimensional Change		
3	Contact Resistance (Low Level)	4 point dry circuit method	10 milliohms MAXIMUM*	0.02 mΩ	-5.72 mΩ	4.02 mΩ
4	Temperature Life	115 °C for 192 hours per EIA-364-17B Method A	No damage	No visual or Dimensional Change		
5	Contact Resistance (Low Level)	4 point dry circuit method	10 milliohms MAXIMUM*	-0.08 mΩ	-11.06 mΩ	3.06 mΩ
6	Random Vibration	EIA 364-28 Condition VIID 15-500 Hz 15 min in each axis	No Discontinuity	Discontinuity < 1 microsecond		
7	Contact Resistance (Low Level)	4 point dry circuit method	10 milliohms MAXIMUM*	0.14 mΩ	-5.64 mΩ	1.03 mΩ

*Change from initial

REVISION: A	ECR/ECN INFORMATION: EC No: UCP2003-0715 DATE: 2002 / 10 / 31	TITLE: TEST SUMMARY FOR SMALL FORM-FACTOR AND Z-AXIS PLUGGABLE CONNECTORS	SHEET No. 4 of 5
DOCUMENT NUMBER: TS-74441-002	CREATED / REVISED BY: K. SWEENEY	CHECKED BY: M. BANAKIS	APPROVED BY: M. BANAKIS



TEST SUMMARY

5.4 ENVIRONMENTAL TESTING

ITEM	DESCRIPTION	TREATMENT	REQUIREMENT	MEAN	MINIMUM	MAXIMUM
1	Contact Resistance (Low Level)	4 point dry circuit method	Initial	2.26 mΩ	0.03 mΩ	4.27 mΩ
2	Durability	20 cycles 5 cycles w/ measurement plug 15 cycles w/ cycling plug	No Damage	No Visual or Dimensional Change		
3	Contact Resistance (Low Level)	4 point dry circuit method	10 milliohms MAXIMUM*	0.57 mΩ	-0.18 mΩ	1.30 mΩ
4	Temperature Life	85 °C for 300 hours per EIA-364-17B Method A	No damage	No visual or Dimensional Change		
5	Contact Resistance (Low Level)	4 point dry circuit method	10 milliohms MAXIMUM*	0.37 mΩ	-0.67 mΩ	2.72 mΩ
6	Mixed Flowing Gas	20 days mated per EIA-364-1000.01	No damage	No visual or Dimensional Change		
7	Contact Resistance (Low Level)	4 point dry circuit method	10 milliohms MAXIMUM*	1.57 mΩ	-2.79 mΩ	10.76 mΩ
8	Thermal Disturbance	15 °C – 85 °C 30 minute dwell 10 cycles	No Damage	No Visual or Dimensional Change		
9	Contact Resistance (Low Level)	4 point dry circuit method	10 milliohms MAXIMUM*	1.22 mΩ	-1.84 mΩ	3.26 mΩ
10	Reseating	25 mate/unmate cycles	No Damage	No Visual or Dimensional Change		
11	Contact Resistance (Low Level)	4 point dry circuit method	10 milliohms MAXIMUM*	3.40 mΩ	1.08 mΩ	6.21 mΩ

REVISION: A	ECR/ECN INFORMATION: EC No: UCP2003-0715 DATE: 2002 / 10 / 31	TITLE: TEST SUMMARY FOR SMALL FORM-FACTOR AND Z-AXIS PLUGGABLE CONNECTORS	SHEET No. 5 of 5
DOCUMENT NUMBER: TS-74441-002	CREATED / REVISED BY: K. SWEENEY	CHECKED BY: M. BANAKIS	APPROVED BY: M. BANAKIS