

### 育鼎精密工業股份有限公司 ACRON PRECISION INDUSTRIAL CO., LTD

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REVISION:	ECR/ECN	N INFORMATIO	PRODUCT KHGDIXF			R-883-B	Ex	SHEET No
Α	EC No: DATE:	2009/11/0	PRODUCT NAME	MOD	ULAR JACK INTEGRATE			<b>1</b> of <b>7</b>
DOCUM	DOCUMENT NUMBER: CREATED /			ED BY:	CHECKE	D BY:	APPROV	ED BY:
PS-GD-0002			JEFF.YANG	<b>i</b>	DAVID.C	HEN	TONY.C	HANG



#### 1.0 SCOPE

This Product Specification covers the Modular Jack Right Angle Dip With Integrated Magnetics with selective gold and tin plating for IR reflow application

#### 2.0 PRODUCT DESCRIPTION

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

Modular Jack Right Angle With Integrated Magnetics

#### PRODUCT NUMBER(S)

PRODUCT NAME	SERIES NUMBER
HTGDIXR-883-BE-ISI50170-G/Y-T3	KHGDIXR-883-BE1
HTGDIXR-883-BE-ISI50170-G/G-01	KHGDIXR-883-BE3
HTGDIXR-883-BE-ISI50152-T3 (FOR 4KV)	KHGDIXR-883-BE5
HTGDIXR-883-BE-ISI50170-G/G-T3	KHGDIXR-883-BE6
HTGDIXR-883-BE-ISI50170-G/Y-E3	KHGDIXR-883-BE7
HTGDIXR-883-BE-PJ1035-G/Y-T3	KHGDIXR-883-BE8
HTGDIXR-883-BE-ISI50170-G/G	KHGDIXR-883-BE9
HTGDIXR-883-BA-ISI50170	KHGDIXR-883-BA10

#### 2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

See the appropriate sales drawings (SD-48025-007,009,010,011,012) for information on dimensions, materials, plating and markings.

#### 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

FCC Rules and Regulations, PART 68, Subpart F REA Bulletin 345-81, PE-76; Specification for modular telephone set hardware ANSI/EIA/TIA-568 IEC-60603-7 UL 1863 MIL-STD-202; General requirements for test specifications

#### 4.0 RATINGS OF CONNECTOR

#### 4.1 VOLTAGE

150 V RMS AC (Ringing voltage only)

#### **4.2 CURRENT**

1.5 AMPS @ 25°C

#### **4.3 TEMPERATURE**

Operating: - 40°C TO + 70°C

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DOCUM	IENT NUME		2009/11/03 RER: CRE		L ED BY:	CHECKED BY:	APPROV	ED BY:
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#### **5.0 PERFORMANCE**

#### **5.1 ELECTRICAL REQUIREMENTS**

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	DC Resistance	Apply a maximum voltage of <b>20</b> mV and a current of <b>100</b> mA. (Measure J6-J3 or J2-J1)	<b>1.2</b> Ω MAXIMUM
2	Insulation Resistance	Unmated connector, mounted to a PCB: apply a voltage of <b>100</b> VDC between adjacent terminals and between terminals to ground.	<b>500</b> Megohms MINIMUM
3	Current Temperature Rating	Mate connector, and measure the temperature at the rated current (1.5Amps) after 1 hour	<b>30</b> ℃ rise MAXIMUM from initial.
4	Dielectric Withstanding Voltage	1500 VAC rms (1mA cutoff current) for 60 seconds.	No Breakdown

#### **5.2 MECHANICAL REQUIREMENTS**

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5	Connector Mate Force	Mate connector at a rate of 25 ± 6 mm (1 ± 1/4 inch) per minute.	22 N (5 lbf) unshielded MAXIMUM insertion force 35 N (8 lbf) shielded MAXIMUM insertion force
6	Durability	Mate connectors up to <b>750</b> cycles at a maximum rate of <b>10</b> cycles per minute prior to Environmental Tests.	<b>1.2</b> Ω MAXIMUM
7	Vibration (Random)	Amplitude: 1.50mm (.060") peak to peak Sweep: 10-55-10 Hz in one minute Duration: 15 minutes Direction: X, Y,Z axis ( 45 minutes total)	1.Discontinue $\leq$ 1microsecond 2. <b>1.2</b> $\Omega$ MAXIMUM
8	Plug Retention Force	Apply an axial pullout force on the plug at a rate of $25 \pm 6$ mm ( $1 \pm \frac{1}{4}$ inch).	89 N (20 lbf) MINIMUM retention force
9	Shock (Mechanical)	Mate connectors and shock at <b>50 G</b> Half-sine, <b>11ms</b> form shocks in the X, Y, Z axis (9 shocks total).	1.Discontinue $\leq$ 1microsecond 2. 1.2 $\Omega$ MAXIMUM
10	Solderability	Dip solder tails into the molten solder (held at $245 \pm 5^{\circ}$ C) up to 1.0mm from the bottom of the housing for $5 \pm 1$ second	Solderable area shall have minimum of <b>95</b> % solder coverage

#### **5.3 ENVIRONMENTAL REQUIREMENTS**

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ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
11	Shock (Thermal)	Mate connectors; expose to 10 cycles of: -40°C to +85°C 30 minutes dwell	1.IEEE traffic test not to fail. 2. Visual: No Damage 3. <b>1.2</b> $\Omega$ MAXIMUM
12	Thermal Aging	Mate connectors; expose to: 48 hours at 85±2°C	1.IEEE traffic test not to fail. 2. Visual: No Damage 3. <b>1.2</b> $\Omega$ MAXIMUM
13	Humidity (Cyclic)	Mate connectors: expose to 10 cycles at 90-95% relative humidity with temperatures at +25°C and +65°C per MIL-STD-202F method 106F (without -10°C dip)	<ul><li>1.IEEE traffic test not to fail.</li><li>2. Visual: No Damage</li><li>3. 1.2 Ω MAXIMUM</li></ul>
14	IR Reflow	See appendix "A"	1.IEEE traffic test not to fail.     2.Visual: No Damage     3. LED function not to fail
15	Salt Spray	5±1% salt solution Duration 48 hrs	<ol> <li>Visual: No Damage</li> <li>LED function not to fail</li> <li>1.2 Ω MAXIMUM</li> </ol>

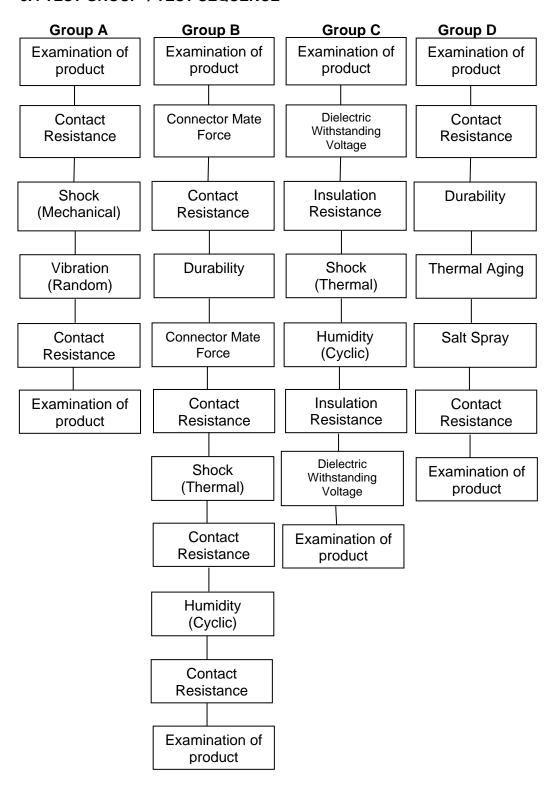
#### Note:

All tests shall meet visual requirements, show no physical damage and meet requirements of following additional 5.4 tests group. The test group shows the test sequences and shall completely test 5 pcs samples in each group. There are another four test items (Current Temperature Rating, Plug Retention Force, Solderability, IR Reflow) should be done by individual test condition and requirement shown above.

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#### **5.4 TEST GROUP / TEST SEQUENCE**



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**JEFF.YANG DAVID.CHEN** TONY.CHANG **PS-GD-0002** 

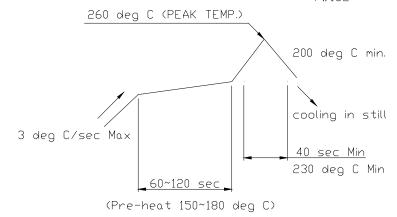


## ACRON PRODUCT SPECIFICATION

#### 5.5 APPENDIX "A" (Pls review with Rockwell spec.)

(INFRARED SOLDERING CONDITION)

TEMPERATURE CONDITION GRAPH TEMPERATURE ON BOARD PATTERN SIDE TWICE



#### (NOTE)

- 1. Pleose check the reflow soldering condition by your own devices beforehand Because the condition changes by the soldering devices, P.C.Boards, and so on.
- 2. Thickness of the cream solder shall be maintained 0.12mm Min. After reflow process.

#### **6.0 PACKAGING**

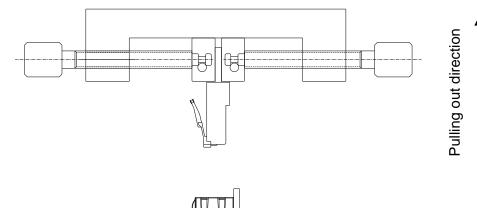
Parts shall be packaged to protect against damage during handling, transit and storage. See appropriate sales drawings.

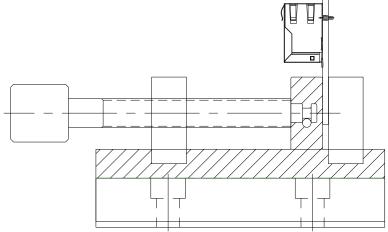
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#### 7.0 OTHER INFORMATION

- (A) MAGNETICS ELECTRICAL PERFORMANCE & LED ELECTRICAL PERFORMANCE **SEE APPROPRIATE SALES DRAWINGS**
- (B) Plug retention force test instruction





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