

## 标准&定制开关连接器产品制造商

DONG GUAN XI BANG ELECTRONICS CO., LTD.

## 规 格 书 SPECIFICATION

<b>CUSTOMER NAM</b>	客户名称:	
CUSTOMER NO.	客户编号:	
SERIES	系 列:	HDMI连接器
MODEL NO.	型 号:	XB-series
DRAWING NO.	图 形 号	CU Series HDMI Connector

If specification of this product meets your request, please confirm all the items of it and return to us with signature and stamp, it will be basis of our production and record. Thanks your cooperation in advance!

若此产品规格符合贵司要求,敬请确认此规格书内所有项目 并签名和盖章后回传给我司,以作我司产品制作之

依据和存档之用,多谢合作!

#### EXAMINE & APPROVAL 审批

APPROVE 接受			NOT APPROVE 不接受
SIGNATURE 签署	STAMP盖章	DATE日期	

PREPARED BY.制表人	CHECKED BY.校对	APPROVED BY.审核	APPROVAL BY. 批准
研发部	品质部	工程部	总经办
戴海明 2022. 06. 08	黄自清 2022. 06. 08	庞军 2022. 06. 08	吴量 2022. 06. 08

### 东莞市溪榜电子有限公司

#### Dong guan Xi Bang Electronics Co., Ltd

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required)

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Quality core! Afterburner for Made in China!



ENGINEERING DEPT.PRODUCT SPECIFICATIONSPEC.NO.: SPCU029BREVISIONSECNT120150For CU11 HDMI Right Angle SeriesPAGE: 1/5

#### 1. SCOPE:

This specification covers the product performance, tests methods and quality requirements of the HDMI C Type Series connector.

#### 2. APPLICABLE STANDARDS

MIL - STD - 202 Test methods for electrical component parts

EIA-364 Test methods for electrical connectors
EIA - RS - 364 Test methods for electrical connectors

J-STD-020 Resistance to soldering Temperature for through hole Mounted Devices SS-00254 Test methods for electronic components ,LEAD-FREE soldering Part design

standards

#### 3. APPLICABLE SERIES NO.: CU11SAH1UF0

### 4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

#### 5. MATERIALS

See attached drawings

#### 6. ACCOMMODATED P.C.BOARD

6.1 Thickness: 1.6 mm (.063")

6.2 P.C. Board Layout: See attached drawings

REVIEWED: XIE.BIGN.XIN APPROVED: HE.LONG.FEI VERIFIED: PANG.DONG.



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DONG GUAN XI BANG ELECTRONI CS CO., LTD.

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#### 7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		0.5A. 40V AC.
7.2	Contact resistance	Mate connectors Contacts: Measure by dry circuit, 20m Volts Max. 10mA. EIA-RS-364-23B	Contacts: $30 \text{ m}\Omega$ Max. (before & after)
		Mate connectors Shell: Measure by open circuit, 5Volts Max.100mA EIA-RS-364-23B	Shell : $30 \text{ m}\Omega$ Max. (before & after)
7.3	Dielectric strength	Unmated connectors, Apply 500 Volts AC (R.M.S.) for 1minute between adjacent terminal or ground.  Mated connectors, Apply 300 Volts AC (R.M.S.) for 1 minute between adjacent terminal and ground.  EIA-RS-364-20C	No breakdown
7.4	Insulation resistance	Unmated connectors, Apply 500Volts DC between adjacent terminal or ground.  EIA-RS-364-21C  Mated connectors, Apply 150Volts DC	Unmated: $100 \text{ M}\Omega$ Min.  Mated: $10 \text{ M}\Omega$ Min.
		between adjacent terminal or ground. EIA-RS-364-21C	

#### 8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Insertion / Withdrawal Force	The force shall be measured with the plug at rate of 25mm/minute. This test shall be made in a direction along the axis of both the socket and the plug. After 4 times, mating force and un-mating force shall be measure.  EIA-RS-364-13A	Appearance: No damage Insertion force: 4.5 kgf Max. Withdrawal force: 1.0~4.0 kgf
8.2	Durability	Measure contact and shell resistance after Following. Automatic cycling: Type A:10,000 cycles at 100±50 cycles per hour EIA-RS-364-09A	Appearance: No damage Contact resistance: Contact: $30 \text{ m}\Omega$ Max. (before & after) Shell: $30 \text{ m}\Omega$ Max. (before & after)



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#### 9. ENVIRONMENTAL PERFORMANCE:

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	ITEM	TEST CONDITION	REQUIREMENT
9.1	Vibration	Amplitude: 1.52mm P-P or 147m/s <sup>2</sup> (15G)	Appearance: No damage.
		Sweep time: 50-2000-50Hz in 20 minutes.	Contact resistance:
		Duration: 12 times in each X \ Y \ Z axes.	Contact: $30 \text{ m}\Omega$ Max.
		(total of 36 times)	(before & after)
			Shell: $30 \text{ m}\Omega$ Max.
		Electrical load: DC 100mA current shall be flowed during the test. EIA-RS-364-28	(before & after)
			Discontinuity:1 µsec max.
9.2	Solder ability	Soldering time: $5 \pm 0.5$ seconds	Minimum:
		Soldering pot: 245 ± 5°C	95% of immersed area
		MIL-STD-202F, Method 208	
9.3	Humidity	The specimens shall be placed in a chamber and subjected to a relative humidity of 90% to 95% and a temperature of 40±2 °C for 96 hours then placed in ambient temperature for more than 1 hour.	Appearance: No damage. Insulation resistance: $100 \text{ M}\Omega \text{ Min (before \& after)}$ Contact resistance: Contact: $30 \text{ m}\Omega \text{ Max.}$ (before & after)
		EIA-RS-364-31A	Shell: $30 \text{ m}\Omega$ Max. (before & after)
9.4	Salt spray	Temperature: $35 \pm 3$ °C  Solution: $5 \pm 1\%$ Spray time: $48 \pm 4$ hours  (Stamping before plated)  Spray time: $24 \pm 4$ hours  (Stamping after plated)  Mate connectors and expose to the following salt mist conditions. Upon completion of the exposure period, salt deposits shall be removed by a gentle wash or dip in running water and dried naturally, after which the specified measurements shall be performed.  The specimens shall be suspended from the top using waxed twine, string or nylon thread.  The test only define the plating area, without plating area (as copper cross section) will not be defined.  (EIA 364-26B / MIL-STD-202 Method 101)	Appearance: No damage Contact resistance: Less than twice of initial



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	ITEM	TEST CONDITION	REQUIREMENT
9.5	Resistance to soldering heat	The connector shall be tested resistance. To soldering heat in the following conditions. Soldering time: 10 second.	Appearance: No evidence of physical damage
		Soldering pot: 250°C	
		Refer Reflow temperature profile(11.1)	
9.6	Temperature life	The specimens shall be subjected to a	Appearance: No damage.
	(heat)	temperature of 105±5 °C for 250 hours, then	Insulation resistance:
		placed in ambient temperature for more than 3 hours.	100 M $\Omega$ Min (before & after)
			Contact resistance:
			Contact: $30 \text{ m}\Omega$ Max.
			(before & after)
		MH, CED 12444 M. J. 11005 1	Shell: $30 \text{ m}\Omega$ Max.
		MIL-STD-1344A, Method 1005.1	(before & after)
9.7	Temperature life	The specimens shall be subjected to a	Appearance: No damage.
	(Cold)	temperature of -25 for 96 hours, then placed in	Insulation resistance:
		ambient temperature for more than 3 hours.	100 M $\Omega$ Min (before & after)
			Contact resistance:
			Contact: $30 \text{ m}\Omega$ Max.
			(before & after)
			Shell: $30 \text{ m}\Omega$ Max.
		MIL-STD-1344A, Method 1005.1	(before & after)

10. AMBIENT TEMPERATURE RANGE: Operating Temperature: -25°C to +85°C



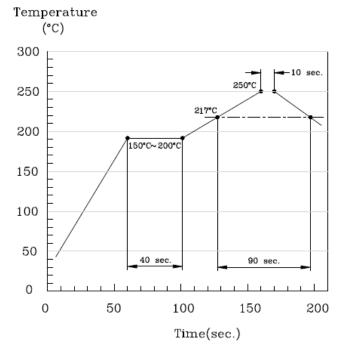
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#### 11. Recommended IR Reflow Temperature Profile:

#### 11.1 Using Lead-Free Solder Paste



12. Test sequences

Test of Examination	Test se	equence	s (Grou	.p)						
Test of Examination	A	В	С	D	Е	F	G	Н	I	J
Visual examination	1 3	1 5	1 3	1 3	1 3	1 5	1 5	$\frac{1}{3}$	1 5	1 5
Contact resistance		2 4					2 4			
Insulation resistance						2 4			2 4	2 4
Dielectric strength	2									
Durability		3								
Insertion / Withdrawal Force			2							
Vibration				2						
Solder ability					2					
Humidity						3				
Salt Spray							3			
Resistance to Soldering Heat								2		
Temperature Life (Heat)									3	
Temperature Life (Cold)										3