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PRODUCT SPECIFICATION

GradConn Part No.:	BB02-AHXX1-KXX-000000
Product Description.:	0.8mm Board to Board Stackers, Straight, Male, SMT Type

PRODUCT SPECIFICATION

1.Scope

This specification covers the 0.8mm Board To Board Male Plug

2.Product name and part number

Product Name	Part Number
0.8mm Board To Board Stacker Male	BB02-AHXX1-KXX-000000

3.Material/Finish

Name	Material	Finish	Color
Plastic	NY46 (UL94V-0)		
Terminal	Phosphor Bronze	Plating Gold	
Shell			
Other			

*Refer to the drawing.

3.Rating

Item	Standard	
Rated Voltage (MAX.)	100 V	AC/DC
Rated Current (MAX.)	0.5 A	
Ambient Temperature Range	-40℃~+105℃	

*1:Including terminal temperature rise.

4. Component Storage/Shelf Life Info:

Max. duration of storage: _____6_____ months

Packaging method: _____pcs/tray; _____ pcs/carton

Recommended storage condition: ____25__°C (temp) & : __75___ % RH (humidity)

Other special storage instruction:

5.Performance

5-1.Electrical Performance

Item		Test Condition	Requirement
5-1-1	Contact Resistance	Mate applicable the 0.8mm Board To Board Socket 3.55mm Height and measure by Dry circuit,20mV MAX.10Ma.	40 mΩ Max
5-1-2	Insulation Resistance	Mate applicable the 0.8mm Board To Board Socket 3.55mm Height and apply 500V DC Between adjacent terminal or ground.	100M Ω Min

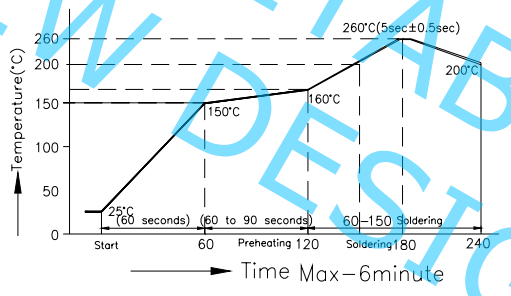
5-1-3	Dielectric Strength	Mate applicable the 0.8mm Board To Board Socket 3.55mm Height and apply 500V AC (rms) for 1 minute between adjacent terminal or ground.	No Breakdown

5-2 Mechanical Performance

Item		Test Condition	Requirement
5-2-1	Insertion and Withdrawal Force	Insert and extract applicable the 0.8mm Board To Board Socket 3.55mm Height at the speed rate of 100±3mm/minute	
5-2-2	Terminal Retention Force	Pull the terminal at the speed Rate of 100±3mm per minute.	0.2 kgf Min

5-3,Environmental Performance and Others

Item	Test Condition	Requirement		
5-3-1	Repeated Insertion Extraction	Insert and extract applicable The 0.8mm Board To Board Socket 3.55mm Height up to 10 cycles per minute.	Contact Resistance	40 mΩ Max
5-3-2	Temperature Rise	Carrying rated current load. (UL 498)	Temperature rise	20 ℃ MAX.
5-3-3	Vibration	Amplitude:1.5mm P-P Sweep time:10-55-10 Hz In 1 minute Duration: 2 hours in each X.Y .Z .axes	Appearance	No Damage
			Contact Resistance	40 mΩ Max
			Dis-Continuity	1 μ sec. MAX.
5-3-4	Shock	490m/S^2 (50G),3 strokes in each X, Y, Z axes. (JIS C0041/MIL-STD-202 Method 213)	Appearance	No Damage
			Dis-Continuity	1 μ sec. MAX.
5-3-5	Heat Resistance	105±2℃ 96 hours	Appearance	No Damage
			Contact Resistance	40 mΩ Max
5-3-6	Cold Resistance	-40±2℃ 96 hours	Appearance	No Damage
			Contact Resistance	40 mΩ Max
5-3-7	Humidity	Temperature: 40±2℃ Relative Humidity:90~95% Duration: 96hours	Appearance	No Damage
			Contact Resistance	40 mΩ Max
			Dielectric Strength	Must meet 5-1-3
			Insulation Resistance	100M Ω Min
5-3-8	Temperature	5 cycles of:	Appearance	No Damage

	Cycling	a)-55±3℃ 30 minutes b)+85±2℃ 30 minutes	Contact Resistance	40 mΩ Max
5-3-9	Salt Spray	12±4 hours exposure to a salt spray from the 5±1% solution at 35±2℃	Appearance	No Damage
			Contact Resistance	40 mΩ Max
5-3-10	SO_2 Gas	24 hours exposure to 50±5ppm. SO_2 Gas at 40±2℃	Contact Resistance	40 mΩ Max
5-3-11	NH_3 Gas	40 minutes exposure to NH_3 Gas evaporating from 28% Ammonia solution	Appearance	No Damage
			Contact Resistance	40 mΩ Max
5-3-12	Solder-Ability	Solder Time:3±0.5 sec. Solder Temperature:260±5℃ 1.2mm from terminal tip	Solder Wetting	95% of immersed area must show no voids, pin holes
5-3-13	Resistance To Soldering Heat	Soldering Time:5±0.5 sec. Solder Temperature:260±5℃ 1.2mm from terminal tip	Appearance	No Damage
5-3-14	Soldering Profile 5-3-14-1 Manual soldering 5-3-14-2Wave-soldering 5-3-14-3 Reflow	Solder temp: 400±5°C Time: 10± 3 sec Soldering temp : 260 ± 5°C Soldering time : 5 ± 0.5 s Preheating : 150 ± 10°C for 1 to 2 min.  NYLON46 Recommended Temperature Profile Temp ramping rate : 1 ~ 7°C/sec Preheat conditions: ΔTemp = 150 to 160°C @ 60sec < t < 90sec Temp ramping rate : 1 ~ 7°C Reflow Conditions: ΔTemp = 160°C to T^{peak} to 245°C @ 60sec < t < 150sec 245°C < T^{peak} <260°C @ max. 10sec. Temp ramping rate : 1 ~ 7°C/sec Perform visual inspection, (item1), No physical damage, Color change and tarnishing is allowed, Electrical characteristics (item2) and Mechanical characteristics (item 3) after the soldering test		*Supplier to provide measured data into the Table 1.*

TS250F8

40% GF Reinforced, Flame Retardant

【Typical properties】

Properties	Method	Unit	Stanyl TS250F8	
General Properties				
Density	ISO 1183	–	1.74	
Melting Temperature	DSM	℃	295	
Mold Shrinkage(1)	DSM	%	Machine Direction 0.2±0.1	Transvers Direction 0.8±0.3
Humidity Absorption（23C 50%RH）	ISO 1110	wt%	1.2	
Mechancal Properties			DRY	WET
Tensile Strength(2)	ISO 527-1A	MPa	180	130
Tensile Elongasion(2)	ISO 527-1A	%	2	3
Tensile Modulus(3)	ISO 527-1A	MPa	15,000	12,000
Chrpy Impact Strength(4) （23C）	ISO 179-1eA	kJ/m^2	10	12
Chrpy Impact Strength(4) （-40C）	ISO 179-1eA	kJ/m^2	10	10
Flexral Strength(5)	ISO 178	MPa	250	200
Flexral Modulus(5)	ISO 178	MPa	13,000	10,000
Temperture Properties				
HDT-A (1.80MPa)	ISO 75A	℃	> 285	
Coeff. Linear Termal Expansion （20C - 80C）	DSM	1/K×10^{-5}	Machine Direction 2	Transvers Direction 8
Electrical Properties				
Dieelectric Strength	IEC 243	kV/mm	> 30	
Volume Resistivity	IEC 93	O?cm	10^{15}	
Surface Resistivity	IEC 93	O	10^{16}	
Dieelectric Constant	IEC 250	-	4.0	
Dissipation Factor	IEC 250	×10^{-3}	16	
Flammability	UL 94	-	0.75mm V-0	

(1) Measured on plaques (80x80x1mm). Depending on molding condotions.
(2) Test Speed： 5mm/min.
(3) Test Speed： 1mm/min.
(4) Nocthed, Edgewise
(5) Test Speed： 2mm/min.

DJEP does not guarantee the typical values.
Typical values only represent the values one would expect if the property were tested in our lab with our test method on the specified date.

試　験　成　績　書

INSPECTION CERTIFICATE

日鉱金属加工株式会社　倉見工場
KURAMI WORKS,NIKKO METAL MANUFACTURING CO.,LTD.

需要家　同朋中国　殿
CUSTOMER

扱　先　同朋香港　有限公司
MESSRS.

製品名　C5191R-H(190-210)
PRODUCTS

寸　法　0.25 X 305 X L
SIZE

規　格
SPECIFICATION

発　行　日　2005年03月28日　0002
DATE OF ISSUE

納品書番号　57166
DELIVERY SHEET NO.

注文番号　NK5-0303
CONTRACT NO.

オーダー番号　03
ORDER NO.

品質保証課長
MANAGER OF QUALITY ASSURANCE SECTION

Hiroshi Watanabe

化学成分
CHEMICAL COMPOSITIONS

規格 SPECIFICATION		Zn %	Sn %	P %	Fe %	Pb %	Cu+Sn+P %	質量 MASS (KG)
製造番号	MIN		5.5	0.05			99.7	
LOT NO.	MAX	0.20	7.0	0.26	0.10	0.05		
62512		0.01	5.99	0.12	0.003	0.002	99.96	5,136.00

機械的および物理的性質
MECHANICAL AND PHYSICAL PROPERTIES

規格 SPECIFICATION		引張強さ TENSILE STRENGTH N/mm²	伸び ELONGATION %	硬さ HARDNESS HV
製造番号	MIN	590	8.0	190
LOT NO.	MAX	685		210
62512		615	17.6	203.0

寸法検査 DIMENSIONAL INSPECTIONS	GOOD
外観検査 SURFACE INSPECTIONS	GOOD
備考 REMARKS.	

この製品は品質管理計画に基づき製造され、検査・試験を行ない、規格に合格したことを証明する。
WE HEREBY CERTIFY THAT THE PRODUCTS DESCRIBED HEREIN HAVE BEEN MANUFACTURED,INSPECTED AND TESTED IN ACCORDANCE WITH THE SPECIFICATION AND Q.C.PROGRAM.

16	Au/Ni/Copper alloy	(U")02/03 STD	d Coll.	2 Abs.	1

MEAN TOP COAT (Au=Gold) = 3.06u"
STD, DEVIATION = 0.543u"
NO. LF HEAS. = 10

MEAN INT COAT (Nickel) = 50.50u"
STD, DEVIATION = 2.118u"
NO. LF HEAS. = 10

T meas = 10 s

LOCATE SPECIMEN
TO MEASURE PRESS " GO "

Xt1= Xt2=

THICKNESS MEASUREMENT

			Au		Ni
N=	1	THICKNESS=	3.04u"	=	50.51u"
N=	2	THICKNESS=	3.01u"	=	50.10u"
N=	3	THICKNESS=	3.03u"	=	50.24u"
N=	4	THICKNESS=	3.05u"	=	50.37u"
N=	5	THICKNESS=	3.03u"	=	50.15u"

2006/10/14

Test Report

No.: GZ0612186820/CHEM Date: DEC 22, 2006 Page 1 of 3

TONG PENG METAL PRODUCTS (DONGGUAN) CO., LTD.
XIXINGJIE, XIHU LINCUN, TANGXIAZHEN, DONGGUAN SHI, GUANGDONG PROVINCE, CHINA

The following sample(s) was/were submitted and identified on behalf of the applicant as C5191R

SGS Ref No.	: SZ10196505-4.4
Supplier	: POONGSAN
Sample Receiving Date	: DEC 18, 2006
Testing Period	: DEC 18, 2006 TO DEC 22, 2006

Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.

Test Method : With reference to IEC 62321 Ed.1 111/54/CDV
Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products
(1) Determination of Cadmium by ICP.
(2) Determination of Lead by ICP.
(3) Determination of Mercury by ICP.
(4) Determination of Hexavalent Chromium by Colorimetric Method.

Test Results : Please refer to next page.

Conclusion : Based on the performed tests on submitted sample(s), the results comply with the RoHS Directive 2002/95/EC and its subsequent amendments.

Signed for and on behalf of
SGS-CSTC Ltd.

Jiang YongPing, Terry
Sr. Engineer

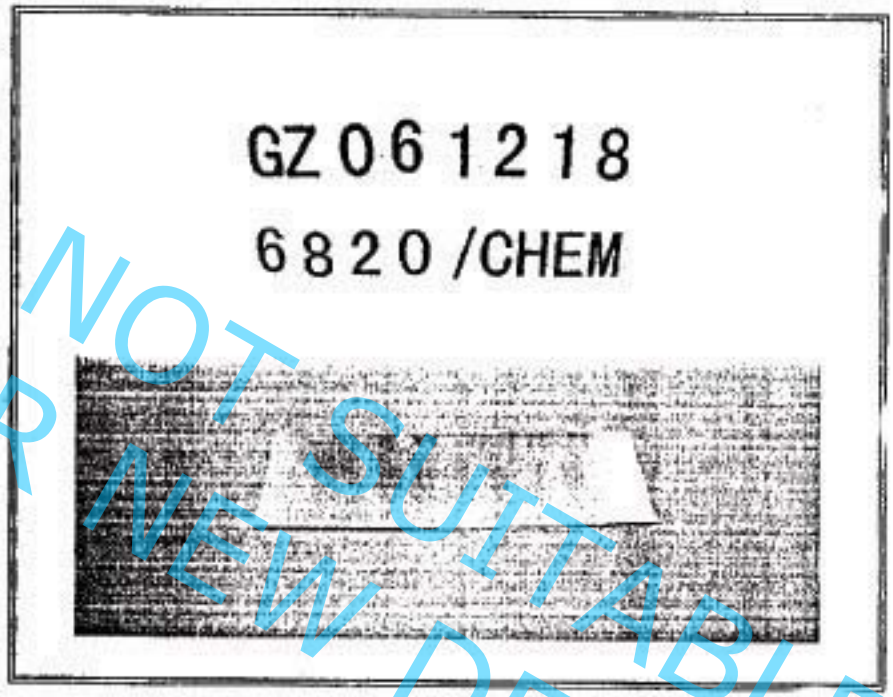
Test results by chemical method (Unit: mg/kg)

Test Item(s):	Method (refer to)	No.1	MDL	RoHS Limit
Cadmium(Cd)	(1)	N.D.	2	100
Lead (Pb)	(2)	26	2	1000
Mercury (Hg)	(3)	N.D.	2	1000
Hexavalent Chromium (CrVI) by Spot test	(4)	Negative	See Note 4	#

Test Part Description:
No.1 Copper-colored metal sheet

Note : 1. mg/kg = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit
4. **Spot-test:**
Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;
(The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.)
Boiling-water-extraction:
Negative = Absence of CrVI coating
Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm^2 sample surface area.
5. # = Positive indicates the presence of CrVI on the tested areas and result be regarded as conflict with RoHS requirement.
Negative indicates the absence of CrVI on the tested areas and result be regarded as no conflict with RoHS requirement.

Sample photo :



SGS authenticate the photo on original report only

*** End of Report ***