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## PRODUCT SPECIFICATION

Grad Conn Part No.: CH03-BH

Product Description: SIM Card Holder SMT Type



## Specification

### 1. General Information

- .Contact Principle: Friction Technology
- .Mounting type: SMT
- .Durability: 5,000 Cycles Min.
- .Material:
- .Data Contact: Phosphor Bronze
- .Insulation: Hi Temp, Plastic (UL 94V-0)
- .Current Rating: 0.5A Max.
- .Plating:
- Gold Plating On Contact Area
- Tin Plating On Soldering Tail

### 2. Electrical & Mechanical Specification

- .Contact Resistance: 50m Ohms Max.
- .Insulator Resistance: 1000M Ohms Min.
- .Dielectric Withstanding Voltage: 500V AC R.M.S For 1 Minute
- .Contact Force: 0.2N~0.6N
- .Contact Retention Force: 0.3kg Min.

### 3. Environmental Specification

- .Operating Temperature: -25 °C ~+85 °C
- .Operation Humidity: 20%~95%

### 4. Solderability

- .Manual Soldering: 360 °C, 3 Sec. Max.
- .Vapor Phase: 215 °C, 30 Sec. Max.
- .IR Re-flow: 260 °C, 15 Sec. Max.

### 5. Pin Out Information

Contact No.	Assignment	Description	Remark
C1	VCC	Power Voltage	
C2	RST	Reset Signal	
C3	CLK	Clocking Signal	
C4	.....	Reserved for future use	Optional
C5	GND	Power and Signal Ground	
C6	VPP	Programming Voltage	
C7	I/O	Serial Data input/output	
C8	.....	Reserved for future use	Optional

## Testing Standard

### 1. Electrical Performance

Item	Requirement	Definition	Test condition	Test Procedure	Equipment
Contact Resistance	50mΩ Max.per contact	Connection between contact of Sim card and connector		IEC-512-2-2a	Micro Ohms Tester
Insulation Resistance	1000MΩ Min.	Performance of insulation between contacts.	500V DC for 1min. Between adjacent contacts and insulators	IEC-512-2-3a	Insulation tester gage
Dielectric Withstand voltage	No Break Down flash over 1.0 mA max. leakage	Insulation between contacts against strength and No break down occurred	500VAC rms for 1 minute between adjacent contact and ground	IEC-512-2-4a	Dielectric Withstand voltage tester

### 2.Environment Performance

Item	Requirement	Definition	Test condition	Test Procedure	Equipment
Solderability	The surface shall be covered with enough solder No damage	Vapor phase IR Re-flow Manual Soldering	215°C , 30 sec.max. 260°C , 15 sec.max. 360°C , 3 sec.max.	IEC-512-6-12a IEC-68-2-20	Soldering Pot. Soldering Iron

### 3.Mechanical Performance

Item	Requirement	Test condition	Test Procedure	Equipment
Durability	1.Contact resistance <20mΩ. 2.Normal contact force redaction<20%	5000cycles of rate 10 cycles to 1 minute.	As per procedure of aging maching.	Durability machine.
Contact Force	0.2N~0.6N		EMV(Ver.3.1.1and 4.0) ISO 7816	Weight Tester
Contact Retention Force	0.3kg min .			Force Tester

Component - Plastics

E41938

**E I DUPONT DE NEMOURS & CO INC**

ENGINEERING POLYMERS, CHESTNUT RUN PLAZA, PO BOX 80713, WILMINGTON DE 19880

**6130L(m)**

Liquid Crystal Polymer (LCP), "ZENITE", furnished as pellets

Color	Min Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
BK	0.38	V-0	-	-	240	130	130
	0.75	V-0	3	4	240	220	240
WT	1.0	V-0	3	4	240	220	240
ALL	1.5	V-0	1	4	240	220	240
	3.0	V-0	0	4	240	220	240

Comparative Tracking Index (CTI): 3

Dimensional Stability (%): -

High-Voltage Arc Tracking Rate (HVTR): 4

High Volt, Low Current Arc Resis (D495): -

Dielectric Strength (kV/mm): 21

Volume Resistivity (10<sup>x</sup> ohm-cm): -

(m) - Virgin and regrind up to 50% have the same basic characteristics except for the Electrical RTI rating below the 0.75 mm thickness.

NOTE - (1) Material designations that are color pigmented may be followed by suffix letters and numbers. (2) Material designations may be prefixed by "ZYT" or "MIN" or "ZEN" or "DEL" or "CRA" or "RYN".

UL94 small-scale test data does not pertain to building materials, furnishings and related contents. UL94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by ULL.

Report Date: 1989-10-11

Last Revised: 2004-03-09

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**IEC and ISO Test Methods**

Test Name	Test Method	Units	Thickness Tested (mm)	Value
IEC Flammability	IEC 60695-11-10	Class (color)	0.38	V-0 (BK)
			0.75	V-0 (BK)
			1.0	V-0 (WT)
			1.5	V-0 (ALL)
			3.0	V-0 (ALL)
Glow-Wire Flammability (GWFI)	IEC 60695-2-12	C	0.75	960
			1.0	960
			1.5	960
			3.0	960
Glow-Wire Ignition (GWIT)	IEC 60695-2-13	C	0.75	850
			1.0	825
			1.5	825
			3.0	875
IEC Comparative Tracking Index	IEC 60112	Volts (Max)	-	-
IEC Ball Pressure	IEC 60695-10-2	C	-	-
ISO Heat Deflection (1.80 MPa)	ISO 75-2	C	-	-
ISO Tensile Strength	ISO 527-2	MPa	-	-
ISO Flexural Strength	ISO 178	MPa	-	-
ISO Tensile Impact	ISO 8256	kJ/m <sup>2</sup>	-	-
ISO Izod Impact	ISO 180	kJ/m <sup>2</sup>	-	-
ISO Charpy Impact	ISO 179-2	kJ/m <sup>2</sup>	-	-

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The materials covered in this database are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. THE FINAL ACCEPTANCE OF THE COMPONENT IS DEPENDENT UPON ITS INSTALLATION AND USE IN COMPLETE PRODUCTS SUBMITTED TO UNDERWRITERS LABORATORIES INC.

### Notice of Disclaimer



新泰伸科技股份有限公司  
HTS TECHNOLOGY CO., LTD.

# INSPECTION CERTIFICATE

QM-QCT-4-002A

台灣省桃園縣楊梅鎮民權路 8 號  
No.8, Ming Lung Road, Yang Mei Chen,  
Tao Yuan Hsien, Taiwan  
TEL : 886-3-472-5833 FAX : 886-3-472-7711

Customer: 亞松貿易有限公司

Specification: C5191R-H JIS H3110C2007

Our Order No:

Property Test

Your P/O No:

Your Part No:

Date: 2007/6/2

Weight: 0 Kg

Lot No.	Standard	Yield strength (Kg/mm <sup>2</sup> )	Tensile strength (Kg/mm <sup>2</sup> )	Young's strength (Kg/mm <sup>2</sup> )	Elongation (%)	Hardness (HV .3)	Conductivity (%IACS)	Bend Test Bad way(180°)	Grain Size (mm)	Weight (Kg)	Composition (wt%)			Surface Roughness Ra(μm)	Sur face	Dimension								
											Cu	Sn	P			Thickness(mm)	Width(mm)							
STB-9605109-1	Dimension 0.25 x 400	56.34	60 ~ 70	12668	≥ 10	190 ~ 210	14	R/T=2 No Crack	≤ 0.01	0	5.5 ~ 7	0.03 ~ 0.35	0.0991	≤ 0.2	0.0002	0.011	0.003	≤ 0.15	0.079	Good	0.24 ~ 0.26	399.8 ~ 400.2	400	
STB-9605109-1																								

Remark: 1. Mechanical properties shall be determined in accordance with ASTM E8 - ISO 6892.  
2. Conductivity shall be determined in accordance with ISO 1337.  
3. The results shown in the certificate refer only to the specimens of the lot number stated above and the contents are issued for reference only.  
4. This certificate cannot be reproduced, except in full, without prior written permission of this company. Any unauthorized alteration, forgery or falsification of the content or appearance of this certificate is unlawful and offenders may be prosecuted to the fullest extent of the law.

Approved by:

Checked by: