东莞市钜明科技有限公司

DONG GUAN JU MING TECHNOLOGY CO.,LTD

承认书

品 名: SD CARD CONNECTOR PUSH TYPE

料 号: <u>SD01/02-AP1**-**</u>

客户:

采购部	工程部	批准

钜明:

工程部	销售部	批准
曾广明 12/09`06		

东莞市钜明科技有限公司

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MSTCONN

东莞市钜明科技有限公司

DONG GUAN JU MING TECHNOLOGY CO.,LTD

PRODUCT SPECIFICATION

品 名(Title): <u>SD CARD CONNECTOR PUSH TYPE</u>

料号(Part Number): SD01/02-AP1**-**

文件编号(Spec. No.): ____SP-TH01

版本(Revision): A

修订记录

版本	ECN 编号		修订日期
Rev.	ECN Number	修订内容	Issue Date
A		新制定	2006/10/6

核准(Approved By)	审核(Checked By)	制订(Originator)
曾广明 10/08`06	曾广明 10/08`06	纪芳

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SD CONNECTOR PUSH-PUSH TYPE

1. SCOPE

This specification covers performance, tests and quality requirements for SD CONNECTOR PUSH TYPE.

2. APPLICABLE DOCOMENT

The following dourness form a part of this specification to the extent specified herein In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence, In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

1.1 Commercial Standards And Specification

IEC 512 Electromechanical components for electronic equipment; basic testing procedures and measuring methods

EIA 364 Test methods for electrical connectors

 $\mbox{UL-STD-94 Tests for flammability of plastic materials for parts in devices and appliances} \label{eq:UL-STD-94}$

3. 1REQUIREMENTS

3.1 DESIGN AND CONSTRUCTION

Product shall be of the design, construction and physical dimensions specified on the applicable product drawing

3. 2 MATERIALS

- A. Housing: LCP, UL94V-0, Color; black
- B. Contact: Phosphor Bronze

Finish: (a) Contact Area: Au plated over Nickel

- (b) Solder Tail: tin/Lead plated over Nickel or Unload plated over Nickel
- (c) Under plated: Nickel plated overall
- C. Cover: Stainless steel

Finish: (a) Solder tail: Au plated over Nickel

(b) Under plated: Nickel plated overal

3.3 RATINGS

- A. Current Rating 0.5A
- B. Voltage Rating: 5V
- C. Operating temperature : -2.5° C to 90° C

Storage temperature: -40° C to 90° C

Humidity: 95% max. non condensing

3.4 TEST CONDITTON

The product is designed to meet the electrical, mechanical and environmental performance requirements specified in Figure 1.

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3.5 TEST REQUIREMENTS AND PROCEDURES SUMMARY

TEST DESCROPTION	REQUIREMENT	PROCEDURED			
Examination of product	Meets requirements of product drawing	Visual inspection			
	and proconn specification	No physical damage			
	ELECTRICAL				
Contact Resistance	100m Ω Max.	IEC 512part2, test 2a, except100mA maximum			
	Write protect contact $150\text{m}\ \Omega$	test current and 20V maximum open circuit			
	Max.	voltage			
	Card detect contact $150\text{m}\Omega$ Max.				
Insulation Resistance	1000MΩ Min, initial	500VDC			
	100MΩ Min, finial	IEC 512 part2, test3a, method C			
Dielectric Withstanding	No creeping discharge or flashes	500V AC ms ,1 minute, Test between			
Voltage Resistance	occur.	adjacent contact of unmated samples			
	Current Leal cage 1mA Max.	ESA-364-20			
	MECHANICAL				
Total pulling and Insertion force	Total Pulling Force:2N Min	IEC 512part7, atarate of 25mm/minute			
	Total Insertion Force:40N Max.				
Vibration and High Frequency	No physical dam ago	IEC 512 part4, test6c. Mechanical frequency			
		range is $10{\sim}2000$ Hz, acceleration is 2G			
Shock	No physical dam age	IEC 512 part4, test6c. Acceleration is 5G			
Contact Force	2N~20N	IEC 512 Part8			
Connector Intensity	No. physical damage	Applied Force 10N to main body of connector			
		at no card for Up/Down Forward/Backward			
Wrestling (Flapping) Strength	No. physical damage	Applied Force 10N to SD card for			
		UP/Down/Right/Left directions(the card			
		shall be inserted 15mm into the connector the			
		head of the card)			
Durability Cycling	No physical damage	Operation Cycles:10000cycles(push-in			
		push-out)time mate and unmated connectors			
		for 500 cycles per hour EIA364-09			

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	INVIRONMENTAL	
Humidity	Contact resistance; $100m$ Ω	Temperature;40°C+/-2°C
	Max.initial;20M Ω change after	Flumidity;90~95%(RH)
	test. Insulation	Period: 96 hours.
	resisrance;Initial.1000M Ω .after	MIL-STD-202F, method 103B, Test condition; B
	test 100MΩ	
Salt Spray	No harmful corrosion	Temperature;35°C+/2°C
		Concentration:5%
		Period:48 hours.
		MIL-STD-203F, method 101D.
Thermal Shock	No physical damage	MIL-STD-202F , METHOD 107G, Test condition
		A:-55 to+85℃ ,5 cycles.
Moisture Resistance	No physical damage	MIL-STD-202, Method106, test condition
		B, subject mated connectors to 10 cycles
		Between-10 °C and 65 °C at 80 \sim 98% relative
		Humidity.
High Temperature	No physical damage	MIL-STD-2025, Method108, subject mated connectors
Resistance		to 85℃ for 250 hours.
	PHYSICAL	
Solder ability	The test area shall be covered more than 95%	Solder temperature:230℃+/-5℃
	of immersed area with flash solder.	Unload plated solder temperature;245 °C +/-3 °C
		period:5+/-0.5sec;
		MIL-STD-202F , method 208
Resistance to Reflow	NO physical abnormalities such as Crack	Pre-Heat 150∼200℃:60 sec maximum. Heat 265℃+/-5
Soldering Heat	and deformation of housing, shall be	°C 5sec (270°Cmaximum),2 cycles.
	present after the test.	Method 210 Condition: k

Figure 1

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3.6 PRODUCT QUALIFICATION AND REQUALIEI CATION TEST SEQUENCE

				Т	`est	Grou	р			
Test or Examination	A	В	С	D	Е	F	G	Н	Ι	J
Examination of product	1, 9	1,8	1, 5	1, 7	1,6	1, 5	1, 9	1, 9	1, 9	1, 9
Contact Resistance	2, 6	2, 7	2, 4	2, 5	2	2, 4	2, 6	2, 6	2, 6	2, 6
Insulation Resistance	3, 7			3, 6			3, 7	3, 7	3, 7	3, 7
DWV	4, 8						4, 8	4, 8	4, 8	4, 8
Total pulling and Insertion Force		3, 6								
Vibration and High Frequency			3							
Shock				4						
Contact Force					3					
Connector Intensity		4								
Wrestling Strength					4					
Durability Cycling		5								
Humidity	5									
Salt Spray						3				
Solder ability					5					
Thermal Shock							3			
Moisture Resistance								5		
High Temperature Resistance									5	
Resistance to Reflow										5
Soldering Heat										

NOTE:

(a) Numbers indicate sequence in which tests are performed.

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MSTCONN

东莞市钜明科技有限公司

DONG GUAN JU MING TECHNOLOGY CO.,LTD

TEST	REPORT	

品 名(Title): SD CARD CONNECTOR PUSH TYPE

料号(Part Number): SD01/02-AP1**-**

文件编号(Spec. No.): ____SP-TH01____

版本(Revision): A

修订记录

版本	ECN 编号		修订日期
Rev.	ECN Number	修订内容	Issue Date
A		新制定	2006/10/6

核准(Approved By)	审核(Checked By)	制订(Originator)
曾广明 10/08`06	曾广明 10/08`06	纪芳

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SD CONNECTOR PUSH TYPE

1. INTRODUCTION

1.1 Purpose

Testing was performed on the PROCONN SD CONNECTOR PUSH TYPE to determine its conformance to the requirements of PROCONN Project Specification.

1.2 Scope

This report covers the electrical, mechanical, and environmental performance of SD CONNECTRR PUSH TYPE manufactured by the PROCONN.

1.3 Conclusion

SD CONNECTOR PUSH TYPE meets the electrical, meonanical, and environmental performance requirements of PROCONN Product Specification

1.4 Product Description

The PROCONN SD CONNECTOR PUSH TYPE applied at primped circuit board (PCB). The contacts are made from copper alloy with gold plating on the contact interface and tin-lead plating or Unload plated on the solder tail, all over Nickel plating. The housing material is LCP insulating polymer, UL94V-0.

1.5 Test Samples

The test samples were randomly selected from normal current production lots, and the following part numbers were used for test.

Test Group	Quantity	Part Number	Description
ARCDEEGHII	беа	SDC009 PUSH TYPE SERIES	SD CONNECTOR PUSH TYPE

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1.6. Qualification Test Sequence

				Т	`est	Grou	p			
Test or Examination	A	В	С	D	Е	F	G	Н	Ι	J
Examination of product	1, 9	1,8	1, 5	1, 7	1,6	1, 5	1, 9	1, 9	1, 9	1, 9
Contact Resistance	2, 6	2, 7	2, 4	2, 5	2	2, 4	2, 6	2, 6	2, 6	2,6
Insulation Resistance	3, 7			3, 6			3, 7	3, 7	3, 7	3, 7
DWV	4, 8						4, 8	4, 8	4, 8	4, 8
Total pulling and Insertion Force		3, 6								
Vibration and High Frequency			3							
Shock				4						
Contact Force					3					
Connector Intensity		4								
Wrestling Strength					4					
Durability Cycling		5								
Humidity	5									
Salt Spray						3				
Solder ability					5					
Thermal Shock							3			
Moisture Resistance								5		
High Temperature Resistance									5	
Resistance to Reflow										5
Soldering Heat										

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2. TEST RESULT

GP	TEST	SPEC.	DATA			
GP	1651	SPEC.	Mean	Max.	Min.	
	Contact Resistance	100mΩ Max.	29.12 mΩ	$32.85~\mathrm{m}\Omega$	25.77 mΩ	
	Insulation Resistance	1000MΩ Min.	ok	ok	ok	
	DWV	500V AC ms	ok	ok	ok	
A	Humidity	40°C,96hrs	ok	ok	ok	
Λ	Contact Resistance	100 mΩ Max.	$32.15~\mathrm{m}\Omega$	$34.97~\mathrm{m}\Omega$	$28.45~\mathrm{m}\Omega$	
	Insulation Resistance	100 MΩ Min.	ok	ok	ok	
	DWV	500V AC ms	ok	ok	ok	
	Appearance	No Damage	ok	ok	ok	
	Contact Resistance	100 mΩ Max.	29.06 mΩ	$32.97~\mathrm{m}\Omega$	$25.75~\mathrm{m}\Omega$	
	Total Pulling and Insertion Force	2N~40N	9. 27N	9.38N	8. 07N	
	Connector Intensity	No Damage(10N)	ok	ok	ok	
В	Durability Cycling	5000 cycles	ok	ok	ok	
	Total Pulling and Insertion Force	2N~40N	10. 57N	12.83N	10.56N	
	Contact Resistance	100 mΩ Max.	$34.~15~$ m Ω	37.84 mΩ	26.98 mΩ	
	Appearance	No Damage	OK	OK	OK	
	Contact Resistance	100 mΩ Max.	28.87 mΩ	32.99 mΩ	29.74 mΩ	
	Vibration and High Frequency	10∼2000Hz, 2G	OK	OK	OK	
С	Contact Resistance	100 mΩ Max.	45.88 mΩ	46.82 mΩ	39.78 mΩ	
	Appearance	No Damage	OK	OK	OK	
	Contact Resistance	100 mΩ Max.	29.78 mΩ	$32.75~\mathrm{m}\Omega$	26.53 mΩ	
	Insulation Resistance	1000MΩ Min.	OK	OK	OK	
D	Shock	No Damage	OK	OK	OK	
ע	Insulation Resistance	100 mΩMin.	OK	OK	OK	
	Contact Resistance	100 mΩ Max.	32.89 mΩ	$34.86~\mathrm{m}\Omega$	$26.55~\mathrm{m}\Omega$	
	Appearance	No Damage	OK	OK	OK	
	Contact Resistance	100 mΩ Max.	27.88 mΩ	32.02 mΩ	26. 18 mΩ	
	Contact Force	0. 2∼0. 4N	0.28N	0.37N	0. 25N	
Е	Wrestling Strength	No Damage(10N)	OK	OK	OK	
	Solder ability	Covered more than 95%	OK	OK	OK	
	Appearance	No Damage	OK	OK	OK	
	Contact Resistance	100 mΩ Max.	$32.11~\text{m}\Omega$	35. 20 mΩ	29.32 mΩ	
F	Salt Spray	35℃,48hrs	OK	OK	OK	
1	Contact Resistance	100 mΩ Max.	$34.23~\mathrm{m}\Omega$	37.96 mΩ	32.44 mΩ	
	Appearance	No Damage	OK	OK	OK	

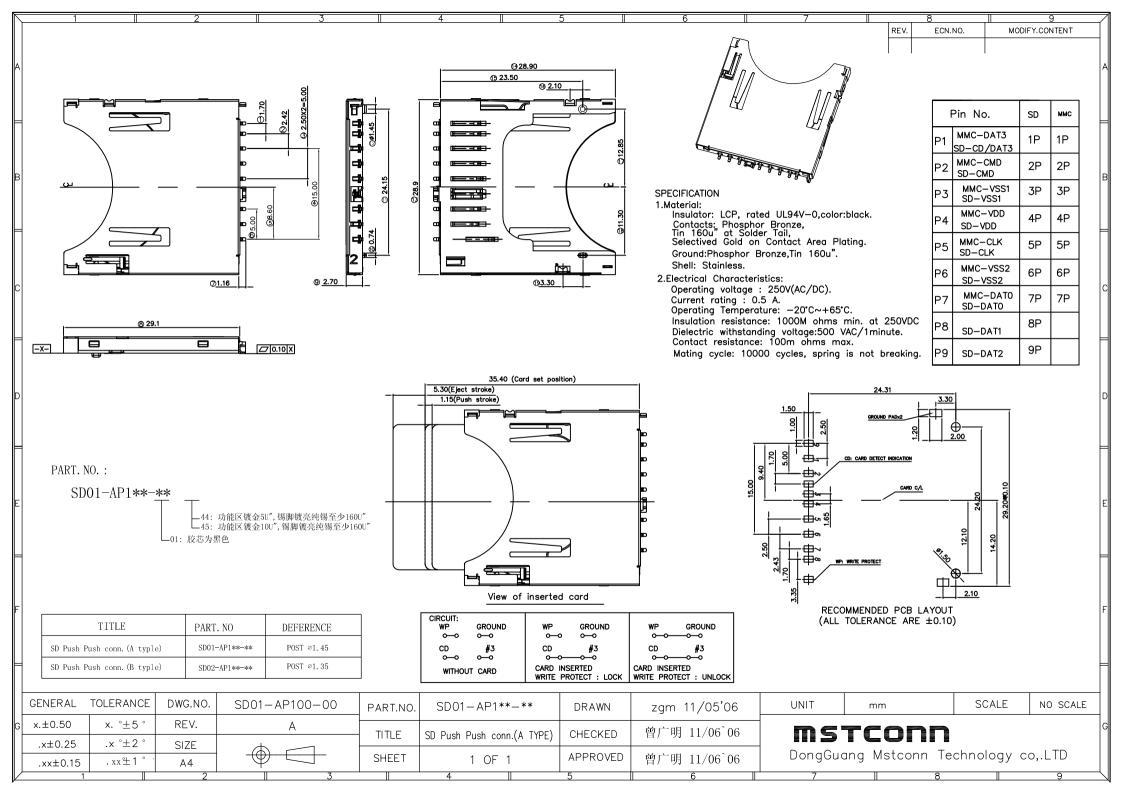
Figure 2(Cont)

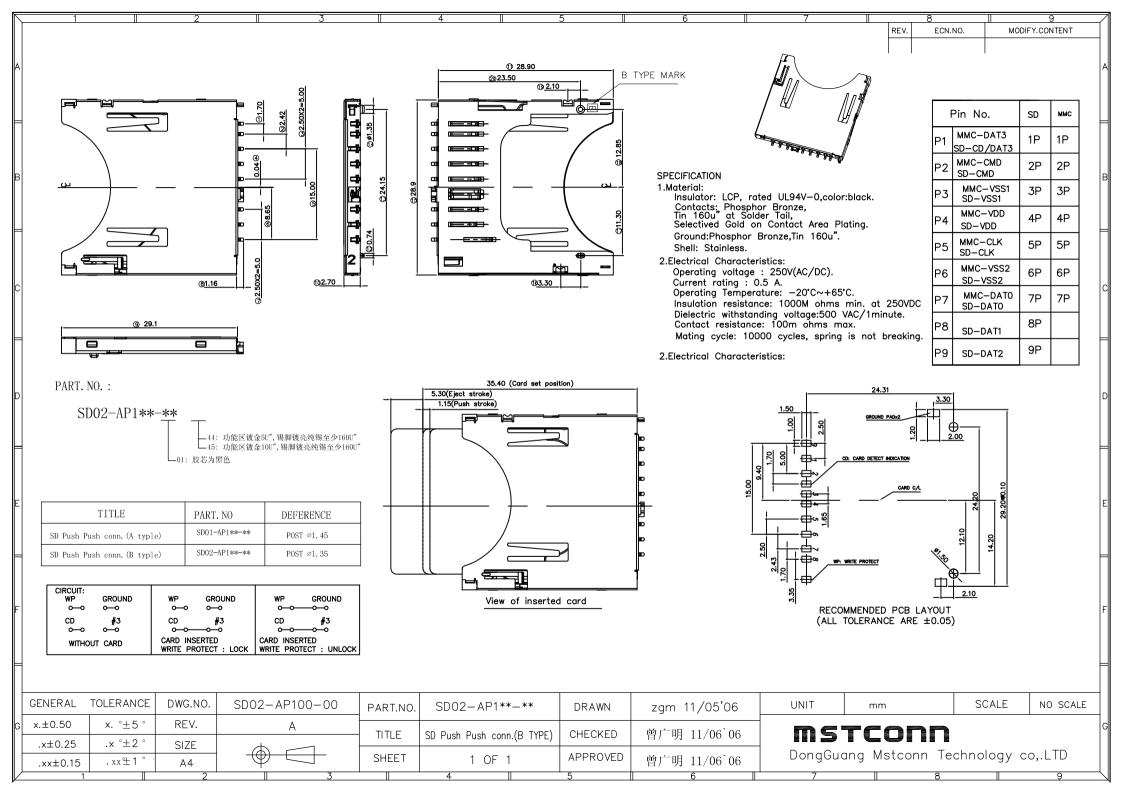
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	#Po#	2000	DATA				
GP	TEST	SPEC.	Mean	Max.	Min		
	Contact Resistance	100mΩ Max.	30.11 mΩ	34.45 mΩ	29.17 mΩ		
	Insulation Resistance	1000MΩ Min.	0k	Ok	0k		
	DWV	500VAC rms.	0k	0k	0k		
G	Thermal Shock	-55°Cto÷85°C,5Cycles	0k	Ok	0k		
	Contact Resistance	100mΩ Max.	35.25 mΩ	39.97 mΩ	29.55 mΩ		
	Insulation Resistance	100 MΩ Min.	0k	Ok	0k		
	DWV	500VAC rms.	0k	Ok	0k		
	Contact Resistance	100mΩ Max.	26. 12 mΩ	31.86 mΩ	22.33 mΩ		
	Insulation Resisrancel	1000MΩ Min.	0k	Ok	0k		
	DWV	500VAC rms.	0k	Ok	0k		
Н	Moisture Resistance	-10℃and65℃,10Cycles	0k	Ok	0k		
	Contact Resistance	100mΩ Max.	32.41 mΩ	33.97 mΩ	26.21 mΩ		
	Insulation Resistance	100 MΩ Min.	0k	0k	0k		
	DWV	500VAC rms.	0k	0k	0k		
	Contact Resistance	100mΩ Max.	30.87 mΩ	31.48 mΩ	26.57 mΩ		
	Insulation Resistance	1000m Ω Min.	0k	0k	0k		
	DWV	500VAC rms.	0k	0k	0k		
Ι	High Temperature Resistance	85℃,250hr	0k	0k	0k		
	Contact Resistance	100mΩ Max.	37.15 mΩ	39.87 mΩ	30.45 mΩ		
	Insulation Resistance	100 MΩ Min.	0k	0k	0k		
	DWV	500VAC rms.	0k	0k	0k		
	Contact Resistance	100mΩ Max.	30.11 mΩ	36.11 mΩ	30.28 mΩ		
	Insulation Resistance	1000M Ω Min.	0k	0k	0k		
	DWV	500VAC rms.	0k	0k	0k		
Ј	Resistance to Reflow Soldering Heat	No Damage	Ok	Ok	0k		
	Contact Resistance	100mΩ Max.	31.15 mΩ	33.97 mΩ	29.35 mΩ		
	Insulation Resistance	100 MΩ Min.	0k	Ok	0k		
	DWV	500VAC rms.	0k	Ok	0k		

Figure2 (End)

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东莞市钜明科技有限公司

Dong Guan Mstconn Technology CO, LTD

产品尺寸检验报告(FAI)

日期 Date:2006.10.09

品	名	SD Push Push cont	n.(A type)	料 号	SD01-A	.P1**-**	图 Part	号	SD01-AP100-00
樣	k 品來源 口外購outsourcing amples Source 口自製Factory		Part No. 樣品數 Sample Size	4PCS		版 次 REV		A	
項	圖	•		競結果 Test	Result (单位Unit:	mm)		备 注
次 Item	位 Loc.	Specification	1	2	3	4	判 OK	定 NG	Remark
1.)	200.	1.70±0.15	1.715	1.721	1.719	1.714	OK	110	
2.)		2.42±0.15	2.406	2.413	2.409	2.407	OK		
3.)		5.00±0.15	5.011	5.019	5.013	5.016	OK		
4.)		15.00±0.15	14.929	14.937	14.931	14.935	OK		
5.)		8.60±0.15	8.615	8.613	8.621	8.629	OK		
6.)		5.00±0.15	5.092	5.084	5.086	8.094	ОК		
7.)		1.16±0.15	1.221	1.193	1.189	1.211	ОК		
8.)		29.1±0.25	29.212	29.241	29.197	29.256	OK		
9.)		2.70±0.15	2.746	2.731	2.799	2.717	OK		
10.)		0.74±0.15	0.754	0.763	0.741	0.736	OK		
11.)		24.15±0.15	24.221	24.235	24.217	24.256	OK		
12.)		1.45±0.15	1.438	1.456	1.437	1.431	OK		
13.)		28.9±0.25	28.94	28.97	28.96	28.92	OK		
14.)		28.90±0.15	28.94	28.97	28.91	28.98	OK		
15.)		23.50±0.15	23.512	23.546	23.559	23.528	OK		
16.)		2.10±0.15	2.116	2.172	2.161	2.136	OK		
17.)		12.85±0.15	12.879	12.880	12.817	12.864	OK		
18.)		11.30±0.15	11.347	11.391	11.354	11.323	OK		
19.)		3.30±0.15	3.329	3.337	3.319	3.362	OK		
20.)									
21.)									
22.)									
23.)									
24.)									
25.)									
26.)									
27.)									
28.) 備註	<u> </u>								
核	定	曾广明 10/10`06	審查	曾广阳	10/10`06	檢驗員			 纪 芳
Appro	ved By	日/ -/J 10/10 00	Checked By		. 37 10 00	Inspected By			-5 /3

东莞市钜明科技有限公司

Dong Guan Mstconn Technology CO, LTD

产品尺寸检验报告(FAI)

日期 Date:2006.11.15

品 Descr	名	SD Push Push con	n.(B type)	料 号 Part No.	SD02-A	.P1**-**	图 5	I SDOV-AP100-001
樣	表品來源 口外購outsourcing		樣品數 Sample Size		CS	版 次 REV	ζ Δ	
項	置	規格			Result	(单位Unit:		<u></u> 备注
次 Item	位 Loc.	Specification	1	2	3	4	判定 OK 1	Remark
1.)	200.	1.70±0.15	1.716	1.721	1.719	1.717	OK	
2.)		2.42±0.15	2.416	2.423	2.409	2.411	OK	
3.)		5.00±0.15	5.040	5.019	5.042	5.024	OK	
4.)		0.04±0.15	0.0431	0.0417	0.0422	0.0429	OK	
5.)		15.00±0.15	15.033	15.031	15.043	15.042	OK	
6.)		8.65±0.15	8.674	8.643	8.695	8.627	OK	
7.)		5.00±0.15	5.014	5.019	5.033	5.041	OK	
8.)		1.16±0.15	1.182	1.147	1.159	1.148	OK	
9.)		29.1±0.25	29.19	29.13	19.2	29.17	OK	
10.)		2.70±0.15	2.734	2.751	2.763	2.742	OK	
11.)		28.90±0.15	28.95	28.92	28.94	28.97	OK	
12.)		0.74±0.15	0.731	0.756	0.749	0.743	OK	
13.)		24.15±0.15	24.162	24.171	24.158	24.173	OK	
14.)		1.35±0.15	1.336	1.329	1.347	1.359	OK	
15.)		28.9±0.15	28.93	29.85	29.81	28.95	OK	
16.)		3.30±0.15	3.342	3.327	3.359	3.364	OK	
17.)		11.30±0.15	11.319	11.357	11.387	11.326	OK	
18.)		12.85±0.15	12.873	12.846	12.855	12.842	OK	
19.)		2.10±0.15	2.136	2.152	2.151	2.119	OK	
20.)		23.50±0.15	23.514	23.498	23.521	23.532	OK	
21.)								
22.)								
23.)								
24.)								
25.)								
26.)								
27.)								
28.)								
備註:								
核定 Approved By 曾广明 11/16`06 審查 Checked By 曾广明 11/16`06 常 ??? Inspected By 纪芳								

钜明科技有限公司

包裝作業規範

真空盤料號	W02-0001		
紙箱料號	W01-0001		

包裝作業圖示及說明

(PACKING OPERATION DIAGRAM & INSTRUCTION)

- **—**.
- 1) 將成品一一放入包裝盤內,依同一方向放入 .

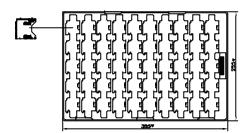
SD PUSH PUSH CONN(A/B TYPE)

SD01-AP1**-** SD02-AP1**-**

2) 包裝時,如圖所示 .

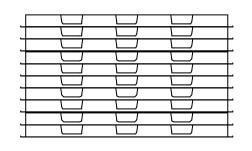
名

3) 一個包裝盤放置 50 個成品 .

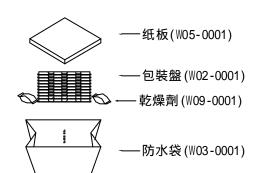


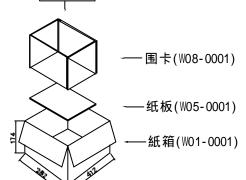
=

- 1) 将放满成品的包装盘依同一方向一层层叠好.
- 2) 如圖所示 .



- Ξ.
- 1) 每箱需放置 21 個包裝盤 .
- 2) 最上面一個包裝盤作為上蓋,固不放置成品 .
- 3) 每箱放置 1000 PCS 的成品 .
- 4) 將成品放置塑膠袋內,上下面各放一包乾燥劑, 包裝完後再裝箱.





- 兀
- 1) 用TAPE將紙箱封實 .



ITEM NO:
Q'TY: 1000 PCS
G.W.: 4.5 KGS
N.W.: 2.7 KGS
MEAS: 16 x 11 x 6 IN



備 註 (REMARK)

1. 若有未裝滿之零數箱,必須以緩衝材塞滿.

ı									
l	GENERL	TOLERANCE	FILE,NO,	3C-ENWOO3A	PART,NO,	SD01/02-AP1**-**	DRAWN	JiFang 2006,11.08	
G	x. ± 0.35	×. *± 5 *	RE√.	Α	TITLE	SD Push Push conn(A/B TYPE)	CHECKED		1
ı	.x ± 0.25	.x *± 2 *	SIZE	A	IIILE	2 P PUSH PUSH EDNAKA/R ITPE	CHILCKLD	曾广明 11/09'06	┰
l	.xx± 0.15	.xx± 1 * '	A4		SHEET	1 OF 1	APPROVED	曾广明 11/09'06	
L	1		2	l 3		4	5	6	

			1 0 -
DATE	2006.11.08	UNIT	mm
MATERIAL		SCALE	

mstconn 东莞钜明科技有限公司 Dong Guan Matconn Technology CO., 1170