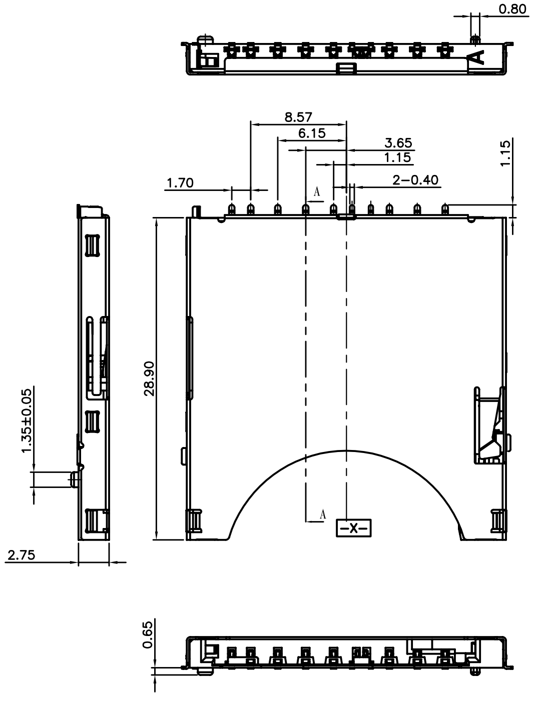
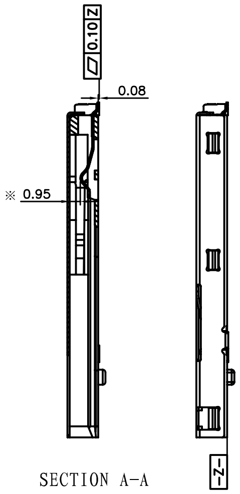
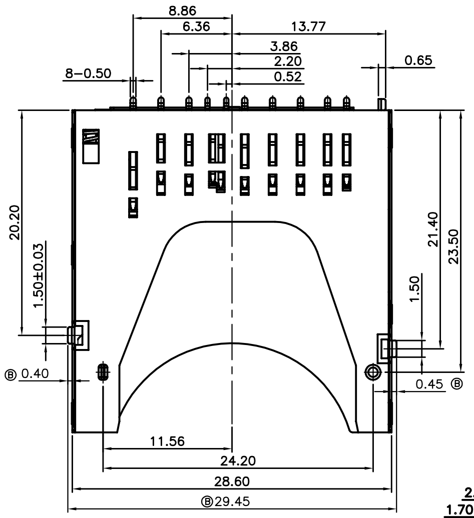
REV	DATE	ECN NO.	MODIFICATION	APPROVER
A	2012/09/18	/	NEW	Jason
B	2012/11/26	RD00312112602	配合客户PCB板修改外壳焊脚尺寸，29.8->29.45	Jason
C	2013/10/11	RD00313101101	依实物修改图面尺寸，详见“©”处	Jason





SECTION A-A

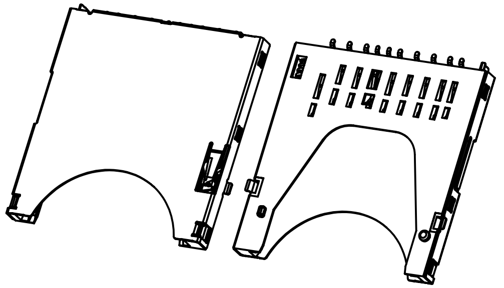


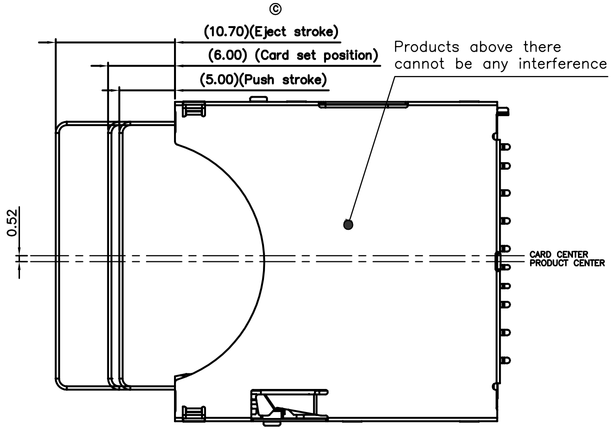
SPECIFICATION

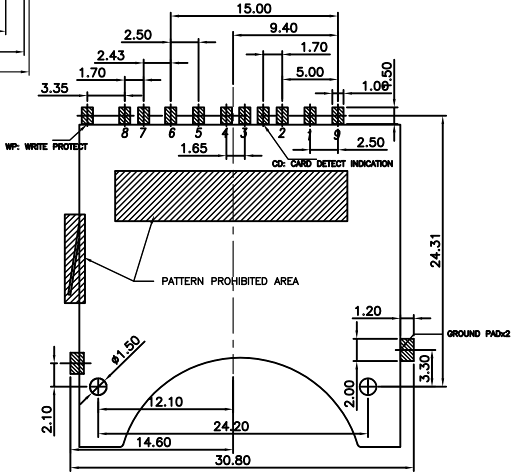
1.Material:
Insulator: LCP, rated UL94V-0,color:black.
Contacts: Phosphor Bronze,
Tin 160u" at Solder Tail,
Selectived Gold on Contact Area Plating.
Ground:Phosphor Bronze,Tin 160u".
Shell: Stainless. Pickling

2.Electrical Characteristics:
Operating voltage : 100V AC(rms)/DC.
Current rating : 0.5 A.
Operating Temperature: -25°C~+90°C.
Insulation resistance: 1000M ohms min. at 250VDC
Dielectric withstanding voltage:500 VAC/1minute.
Contact resistance: 100m ohms max.
Mating cycle: 10000 cycles at the speed rate of 400-600 cycles/h; Without distortion of plastic and serious wear and tear in terminal, No signal break.

3.Product special future symbol: '※'.

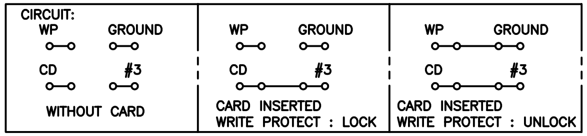






RECOMMENDED PCB LAYOUT
(ALL TOLERANCE ARE ±0.05)

Pin No.		SD	MMC
P1	MMC-DAT3 SD-CD/DAT3	1P	1P
P2	MMC-CMD SD-CMD	2P	2P
P3	MMC-VSS1 SD-VSS1	3P	3P
P4	MMC-VDD SD-VDD	4P	4P
P5	MMC-CLK SD-CLK	5P	5P
P6	MMC-VSS2 SD-VSS2	6P	6P
P7	MMC-DAT0 SD-DAT0	7P	7P
P8	SD-DAT1	8P	
P9	SD-DAT2	9P	



GENERAL TOLERANCE

TOL. / ON.	1	2	3
SELECT	✓		
X.XXX	±0.10	±0.05	±0.15
X.XX	±0.15	±0.13	±0.25
X.X	±0.20	±0.25	±0.5
X.	±0.30	±0.38	±1.00
ANGLE	±2°		

UNITS mm

MAT'L

FINISH

Q'TY

NAME: SD PUSH PUSH conn.

PART NO: SD01A-01***

APPD: Jason_Lee

CHKD: Vicky

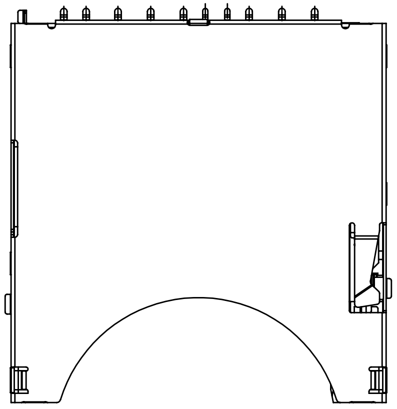
DR: XH

ATOM®
深圳市爱特姆科技有限公司
SHENZHEN ATOM TECHNOLOGY CO.,LTD.

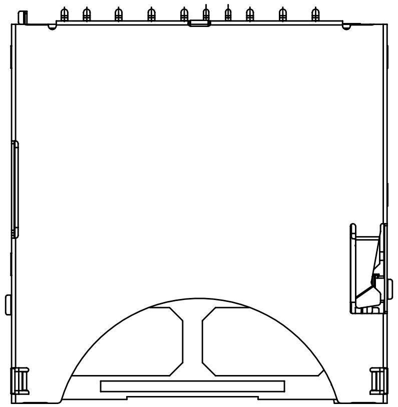
TITLE: SD PUSH PUSH (I) conn.(post ø1.35)

DWG NO. ATOM-A01492

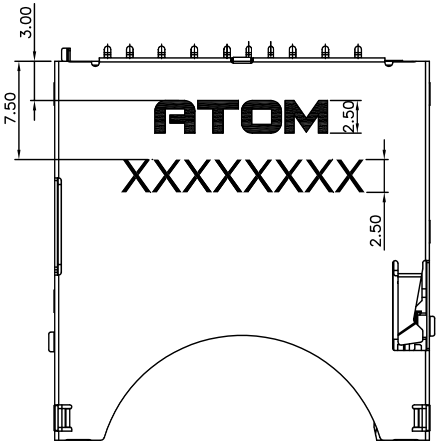
SCALE	SHEET	REV
1:1	1/2	C



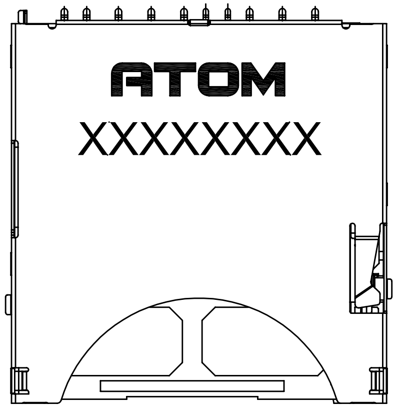
普通型



带假卡



喷 码



带假卡+喷码

NOTES:XXXXXX:Year Month Day, e.g. May 4th, 2010,
jet printing 20100504

GENERAL TOLERANCE			
SELECT	✓		
TOL. / ON.	1	2	3
X.XXX	±0.10	±0.05	±0.15
X.XX	±0.15	±0.13	±0.25
X.X	±0.20	±0.25	±0.5
X.	±0.30	±0.38	±1.00
ANGLE	±2°		

UNITS mm
MAT'L
FINISH
Q'TY

NAME: SD PUSH PUSH conn.
PART NO: SD01A-01***
APPD: Jason_Lee
CHKD: Vicky
DR: XH

ATOM®
深圳市爱特姆科技有限公司
SHENZHEN ATOM TECHNOLOGY CO.,LTD.

TITLE: SD PUSH PUSH (I) conn.(post ø1.35)
DWG NO. ATOM-A01492

SCALE	SHEET	REV
1:1	2/2	C

ATOM®

深圳市愛特姆科技有限公司

SHENZHEN ATOM TECHNOLOGY CO.,LTD.

文件编号	ATOM-WI-RD-1058
版本版次	A/0
页　次	1/1

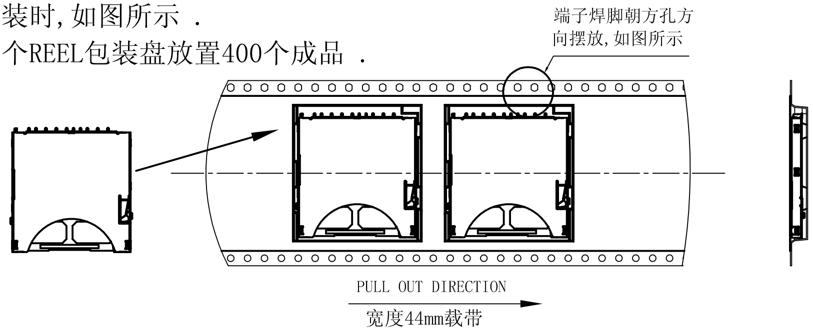
文件名称	SD CARD PUSH-PUSH 接地片外焊（带假卡）卷带包装规范

一.

1)将成品一一放入REEL包装盘内,依同一方向放入 .

2)包装时,如图所示 .

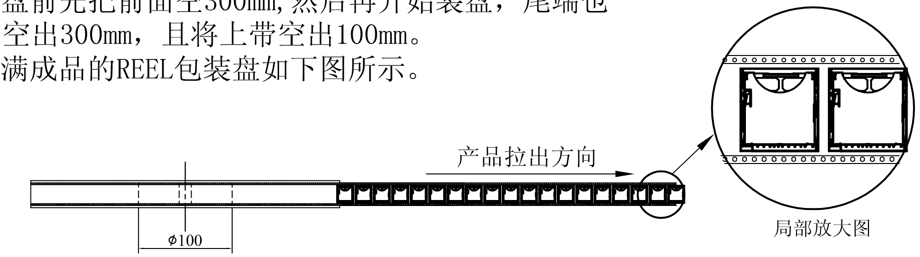
3)一个REEL包装盘放置400个成品 .

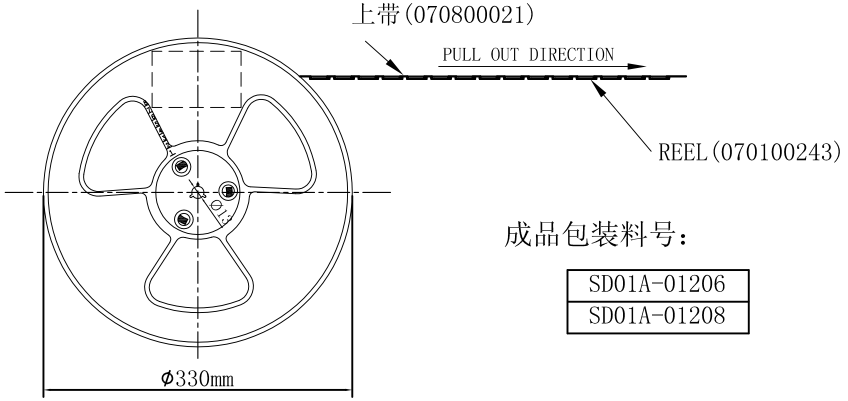


二.

1)装盘前先把前面空300mm,然后再开始装盘，尾端也需空出300mm，且将上带空出100mm。

2)装满成品的REEL包装盘如下图所示。





成品包装料号：

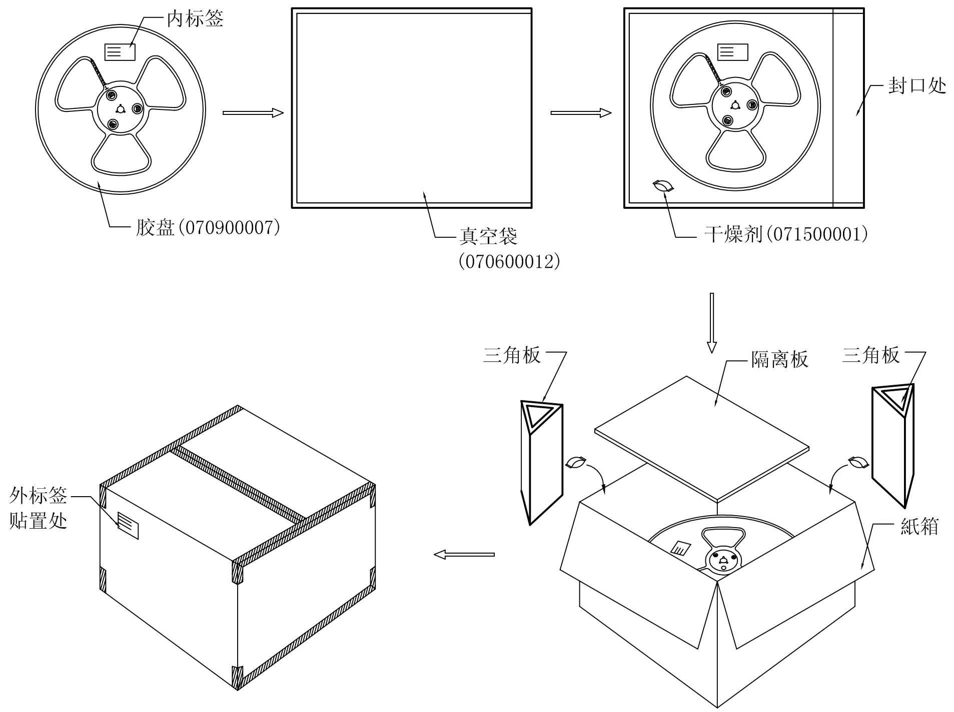
SD01A-01206
SD01A-01208

三.

1)每盘产品贴一张内标签,然后将胶盘放入真空包装袋，袋内放一包干燥剂，再使用真空包装机抽气封口.

2)纸箱上下各放一块隔离板,将每盘产品依次放入箱内,一箱装7盘,四周用三角板固定.每箱内放二包干燥剂,最后用透明胶纸将纸箱四周封实,箱外贴上外标签.

3)若有未装满之零数箱,必须以缓行材料塞满,数量比较少时可单盘包装出货.



3） 纸箱规格.

QTY.: PCS
N.W : KGS
G.W: KGS
MEAS: 36.8X35.7X35.9 CM

C/NO:

核准	杨和敏	审核	李建胜	制定	鲜慧	发行编号	07

PRODUCT SPECIFICATION

1. Scope : This specification covers the requirements for product performance and test methods of SD CARD CONNECTOR. This SD Card has low profile as well as Push-push function t' s suitable for digital product. Such as camera, Notebook, smart phone…

2. Product Shape, Dimensions and Material: Refer to the drawing.

3. Ratings :

Item	Dimensions
Rated Current(Max)	0.5A AC(rms)/DC
Rated Voltage(Max)	100V AC/DC
Operating Temperature Range	-25℃~90℃
Storage Temperature Range	-40℃~90℃
Operating Humidity Range	95% R.H. MAX

4. Performance:

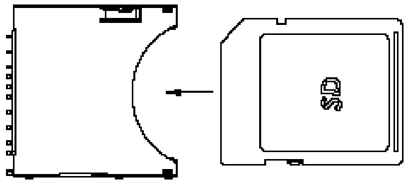
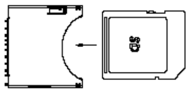
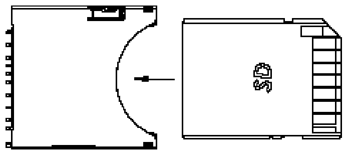
4.1. Electrical Performance

Test Ref.	Item	Test Condition	Standard
4.1.1	Contact Resistance	Mate dummy card, measure contact resistance Using the four terminals method as shown in Fig1.Apply the low level condition of DC20mV MAX. For the open circuit voltage and DC10mA MAX. for the closed circuit current, in accordance with EIA-364-23 .	100mΩ MAX
4.1.2	Insulation Resistance	Apply DC250V between the neighboring contacts or contact and ground, in accordance with EIA-364-21.	1000MΩ MIN
4.1.3	Withstanding Voltage	Apply AC500V (rms) between the neighboring contacts or contact and shell for a minute ,in accordance with EIA-364-20.	Without damage such as arcing or breakdown etc.
4.1.4	Temperature Rise	Mate dummy card, and attach a thermo couple to the soldering part, then apply the rating amperage. Equilibrium temperature shall be measured by a thermo couple measuring method, in accordance with EIA-364-70.	30℃ MAX

Product Description	SD CARD PUSH-PUSH TYPE		Product NO：		
			REVISION	DATE	SHEET NO
APPROVED BY	CHECKED BY	MADE BY	A/1	2011.10.19	1/5
	Jason_Lee	Ivy Wang	DOCUMENT NO	SD-015	

PRODUCT SPECIFICATION

4.2 Mechanical Performance:

Test Ref.	Item	Test Condition	Standard
4.2.1	Contact Retention Force	Apply force on the contact alone the direction opposite to the contact insertion at a speed of 25±3mm/min. Measure the force when the contact dislodges the connector.	0.15kgf MIN.
4.2.2	Card Insertion Force	Push the actually card at the speed rate of 25±3mm/min.	Insertion Force : 2.00Kgf MAX.
4.2.3	Card Retention Force	Insert the SD card in right position and then pull the card at 25±3mm/min.speed.	Initial: 0.20kgf MIN. After operated 10000 cycles: 0.15kgf MIN
4.2.4	Card direction	1. Normal The actually card is inserted in a positive direction and the load of 5kgf is added for ten seconds.	[Appearance] No abnormality Contact Resistance Shall meet 4.1.1.
		2. Direction for behind The SD card is inserted in positive direction of the back and a backward back and the load of 3kgf is added for ten seconds. 	[Appearance] No abnormality [Contact Resistance] Shall meet 4.1.1. 
		3. Back to front The SD card is inserted backward and the load of 3kgf is added for ten seconds. 	[Appearance] No abnormality [Contact Resistance] Shall meet 4.1.1.
4.2.5	durability	Insertion and extraction are repeated10000 cycles with the actually card at the speed rate of 400-600 cycles/h in accordance with EIA-364-20.	[Appearance] No abnormality [Contact Resistance] Shall meet 4.1.1.

Product Description	SD CARD PUSH-PUSH TYPE		Product NO：		
			REVISION	DATE	SHEET NO
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	Jason_Lee	Ivy Wang	DOCUMENT NO	SD-015	

PRODUCT SPECIFICATION

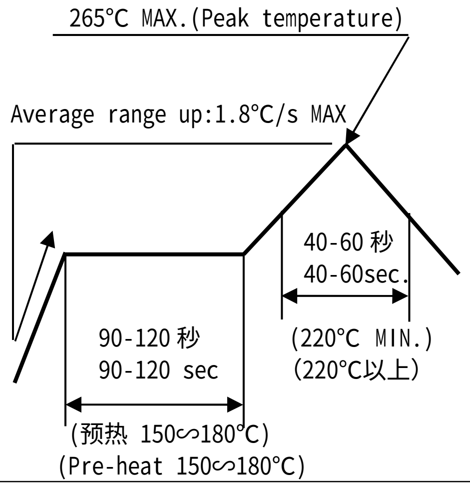
4.3 Environmental Performance and Other

Test Ref.	Item	Test Condition	Standard
4.3.1	Humidity (Steady State)	Mate dummy card and expose them to the following environment in accordance with EIA-364-31, Method III,. Temperature : 40℃±2℃ Humidity : 90~95%RH Duration : 96hours Recovery time 1~2 hours	[Appearance] No abnormality [Contact Resistance] Shall meet 4.1.1. [Insulation Resistance]Shall meet 4.1.2. [Dielectric Withstanding Voltage] Shall meet 4.1.3.
4.3.2	Shock	Mate dummy card and place them on the shock machine, then apply the following shock. Then it shall be measured. In accordance with EIA-364-27 Max. G : 50G Standard duration : 11msec. Wave form : Half sinusoidal Test times : 3 times for each direction, total of 18 times.	[Appearance] No abnormality [Contact Resistance] Shall meet 4.1.1. [Insulation Resistance] Shall meet 4.1.2. [Dielectric Withstanding Voltage] Shall meet 4.1.3.[Discontinuity greater]1.0μsMAX.
4.3.3	temperature (Cycling)	Mate dummy card and subject to the following condition for 5cycles 。 Upon completion of the exposure period ,the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours after which the specified Measurements shall be performed. 1 cycle a) -55±3℃…30 minutes b) +85±2℃…30 minutes Transit time shall be within 3 minutes.	[Appearance] No abnormality [Contact Resistance] Shall meet 4.1.1.

Product Description	SD CARD PUSH-PUSH TYPE		Product NO：		
			REVISION	DATE	SHEET NO
APPROVED BY	CHECKED BY	MADE BY	A/1	2011.10.19	3/5
	Jason_Lee	Ivy Wang	DOCUMENT NO	SD-015	

4.3.4	Vibration	Mate dummy card and place them on the vibrator, hen apply the following vibration. Hen it shall be measured. In accordance with EIA-364-28 Frequency: 10Hz ~55Hz ~10Hz/1min. Direction: Three mutually perpendicular Directions .Total amplitude: 1.52mm Sweep duration: 2 hours for each direction, a total of 6 hours.	[Appearance] No abnormality [Contact Resistance] Shall meet 4.1.1. [Insulation Resistance] Shall meet 4.1.2. [Dielectric Withstanding Voltage] Shall meet 4.1.3 [Discontinuity greater]1.0μs MAX.
4.3.5	High Temperature Life	Mate dummy card and expose them to the following environment in accordance with MIL-STD-202F,Method108A ,Condition C. Temperature : +85℃±2℃ Duration : 96 hours	[Appearance] No abnormality [Contact Resistance] Shall meet 4.1.1.
4.3.6	Cold Temperature Life	Mate dummy card and expose them to the following environment . Temperature : -40℃±3℃ Duration : 96 hours	[Appearance] No abnormality [Contact Resistance] Shall meet 4.1.1.
4.3.7	Thermal Shock	Mate dummy card and expose them to the following environment in accordance with MIL-STD-202F, Method108,Condition C. Temperature:-25℃:30min. 60℃:30min Transition time : 5min.MAX No. of cycles : 5 cycles	Appearance No abnormality Contact Resistance Shall meet 4.1.1.
4.3.8 .	Salt Water Spray	35±2℃、5±1% salt spray 1. Sn plated area at least 12 hours 2. Au plated area 1-3u" for at least 24 hours 3. Au plated area 5u" for at least 48 hours Clean by normal-temperature water after test and then dry under room temperature.	Appearance No abnormality Contact Resistance Shall meet 4.1.1.

PRODUCT SPECIFICATION

Test Ref.	Item	Test Condition	Standard
4.3.9	Solderability	Dip the solder tine of the contacts in the solder bath at 518±5K (240±5℃) for 5±0.5seconds after immersing the tine in the flux of RMA type for 5 to 10 seconds in accordance with EIA-364-52 Category 2.	More then 95% of the dipped surface shall be wet and less than 5% of the pinhole that shall not gather at a point.
4.3.10	Soldering Heat Resistance	1). Reflow part 260±5℃ Peak 220℃ MIN. 60sec.MAX. 2). Pre-heat part 180℃, 0~120sec. * Refer to reflow temperature profile. * The number of reflow is within 2 times.  	No abnormality adversely affecting the performance shall not occur.

Product Description	SD CARD PUSH-PUSH TYPE		Product NO：		
			REVISION	DATE	SHEET NO
APPROVED BY	CHECKED BY	MADE BY	A/1	2011.10.19	5/5
	Jason_Lee	Ivy Wang	DOCUMENT NO	SD-015	