

SPECIFICATION

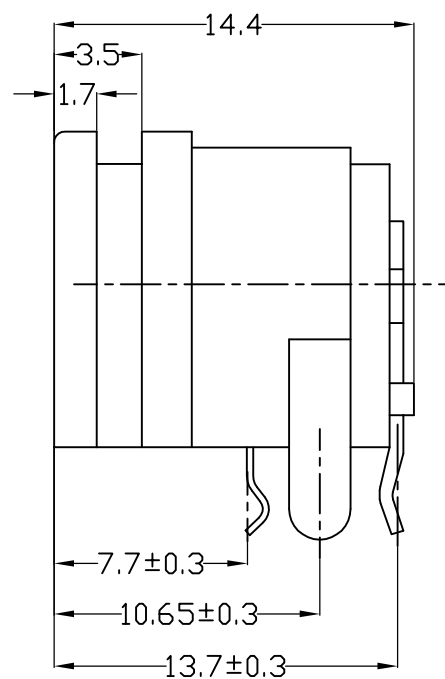
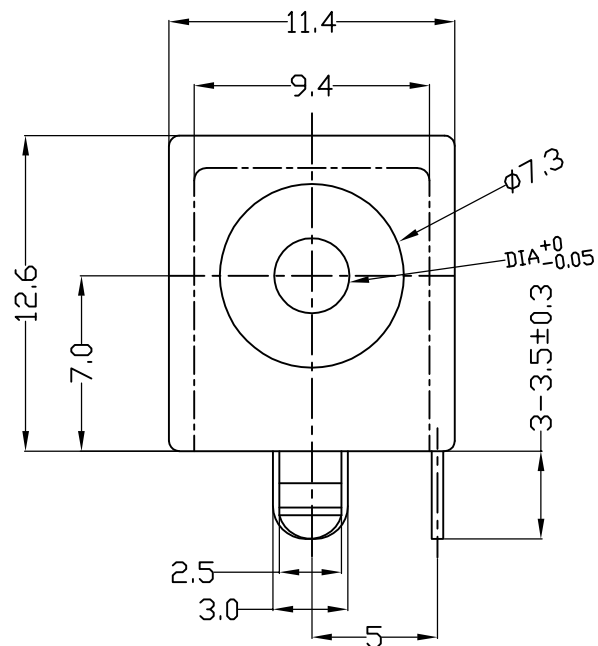
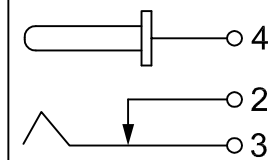
規 格 書

DESCRIPTION 系列名稱: DC JACK (DIP)		DATE 日期: 2015 年 10 月 27 日	
1. RATING (額定值):		DC 12V 1A	
2. MECHANICAL (機械性能)			
ITEM 專案	TEST CONDITIONS 測試條件	PERFORMANCE 規格	
2.1	INSERTION FORCE 插入力度	MEASUREMENT SHALL BE MADE AFTER CONNECTING AND DISCONNECTING USING STANDARD PLUG GAUGE 3 TIMES. 依據標準的 PLUG GAUGE 做 3 次拔插後測定.	0.4~3.0kgf
	WITHDRAWAL FORCE 拔出力度	MEASUREMENT SHALL BE MADE AFTER CONNECTING AND DISCONNECTING USING STANDARD PLUG GAUGE 3 TIMES. 依據標準的 PLUG GAUGE 做 3 次拔插後測定.	
2.2	TERMINAL STRENGTH 端子強度	A STATIC LOAD OF 300gf SHALL BE APPLIED TO THE TIP OF THE TERMINAL FOR 15 SEC. IN ANY DIRECTION 向端子先端的任意一個方向加 300gf 的力度, 時間 15 秒.	THERE SHALL BE NO DAMAGE TO THE TERMINAL SUCH AS CRACKS , LOOSENESS OR PLAY ELECTRICAL AND MECHANICAL CHARACTERISTICS SHALL BE SATISFIED. 端子沒有裂開、鬆動、脫落等異常, 滿足於機械、電器性能.
3.1	STANDARD ATMOSPHERIC CONDITIONS 測試標準狀態	UNLESS OTHERWISE SPECIFIED. THE STANDARD RANGE OF ATMOSPHERIC CONDITIONS FOR MAKING MEASUREMENTS AND TESTS ARE AS FOLLOWS: (1) AMBIENT TEMPERATURE: 5°C TO 35°C (2) RELATIVE HUMIDITY: 45% TO 85% (3) AIR PRESSURE: 86Kpa TO 106Kpa 在沒有指定的情況下測試溫度、濕度、氣壓如下: (1) 溫度為 5°C~35°C. (2) 濕度為 45%~85%. (3) 氣壓為 86Kpa~106Kpa.	
4. ELECTRICAL (電氣性能)			
ITEM 專案	TEST CONDITIONS 測試條件	PERFORMANCE 規格	
4.1	CONTACT RESISTANCE 接觸電阻	MEASURED AT SMALL CURRENT (100 mA OR LESS) 在微小電流 (100 mA) 以下測試.	50mΩ MAX. 50 毫歐以下.
4.2	INSULATION RESISTANCE 絕緣電阻	APPLY A VOLTAGE OF 500V DC FOR 1 MIN. TO FOLLOWING PORTIONS AFTER WHICH MEASUREMENT SHALL BE MADE: (1) BETWEEN BODY AND CONDUCTOR. (2) BETWEEN CONDUCTORS NOT TO BE CONTACT. (3) BETWEEN CONDUCTORS NOT TO BE WHEN PLUG IS INSERTION DC 500V 1 MIN. 輸入 500V DC 電壓 1 分鐘, 按以下接觸方法測試: (1) 本體與端子之間. (2) 不接觸的端子之間. (3) 插頭插入後, 不接觸端子的之間.	100MΩ MIN 100 兆歐以上

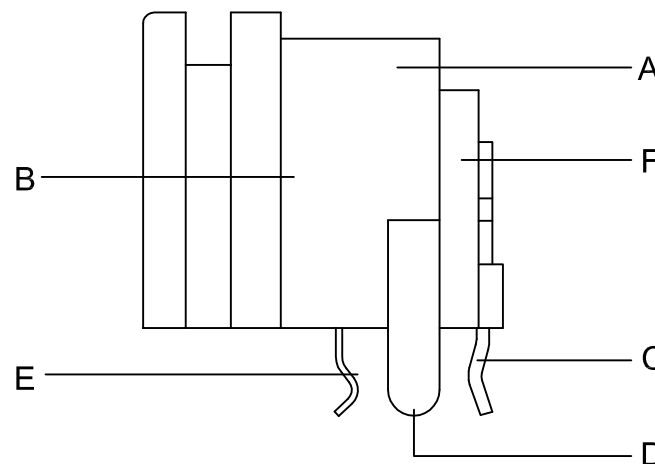
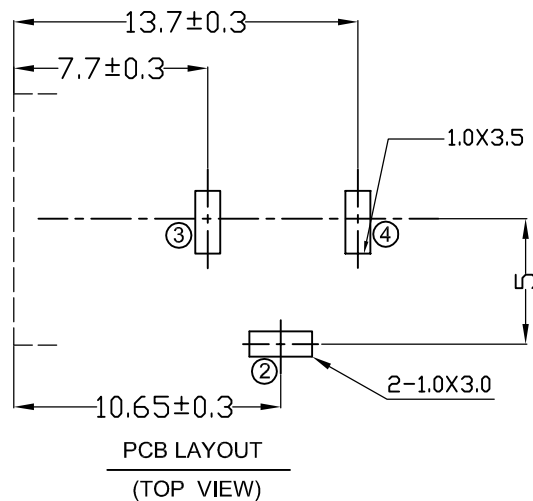
4.3	DIELECTRIC STRENGTH 耐電壓	AC 500V rms (50~60Hz) FOR 1 MIN TRIP CURRENT: 0.5 mA (1) BETWEEN BODY AND CONDUCTOR. (2) BETWEEN CONDUCTORS NOT TO BE CONTACT. (3) BETWEEN CONDUCTORS NOT TO BE WHEN PLUG IS INSERTED DC 500V 1 MIN. 輸入 AC 500V (50~60Hz) 電壓 1 分鐘感度電流為 0.5mA, 按以下接觸方法測試: (1) 本體與端子之間. (2) 不接觸的端子之間. (3) 插頭插入後不接觸端子之間.	WITHOUT DAMAGE TO PARTS ARCING OR BREAKDOWN ETC. 沒有絕緣破壞等異常.
5. SOLDERING TEST (焊錫性):			
ITEM 專案		TEST CONDITIONS 測試條件	PERFORMANCE 規格
5.1	SOLDERABILITY TEST 可焊性試驗	THE TOP OF THE TERMINALS SHALL BE DIPPED 1mm IN THE SOLDER BATH OF 235±5°C FOR 3±0.5 SECONDS. 端子頂部被浸入錫焊池中 1mm 深, 溫度為 235±5°C, 時間為 3±0.5 秒.	(1) SOLDER WETTING TIME SHALL BE 3 SEC OR LESS. 焊接時間應少於 3 秒. (2) THE AREA OF SOLDERING SHOULD BE OVER 90%. 焊接面積應有 90% 以上.
5.2	RESISTANCE TO SOLDERING HEAT TEST 耐焊性試驗	SOLDER BATH METHOD: SOLDER TEMPERATURE 260±5°C IMMERSION TIME 5±1 SEC IMMERSION DEPTH UP TO THE SURFACE OF THE BOARD THICKNESS OF PRINTED WIRING BOARD 1.6mm DIMENSIONS OF COMPONENT HOLES IN THE PRINTED WIRING BOARD SHALL BEING ACCORDANCE WITH THOSE SPECIFIED IN THIS SPECIFICATION. 焊爐焊接的時候溫度控制在 260±5°C, 過爐時間為 5±1 秒, 於 (基板) 厚度為 1.6mm. SOLDERING IRON METHOD: BIT TEMPERATURE 350±10°C APPLICATION TIME OF SOLDERING IRON 3±1 SEC HOWEVER EXCESSIVE PRESSURE SHALL NOT BE APPLIED TO THE TERMINAL. 烙鐵焊接的時候溫度需控制在 350±10°C, 時間為 3±1 秒, 但不能在排腳上施加異常壓力.	WITHOUT DEFORMATION OF CASE OR EXCESSIVE LOOSENESS OF TERMINALS ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED. 本體無變形, 滿足於機械、電氣性能.
6 ENVIRONMENTAL (環境特性)			
ITEM 專案		TEST CONDITIONS 測試條件	PERFORMANCE 規格
6.1	HUMIDITY TEST 潮濕試驗	THE JACK SHALL BE STORED AT A TEMPERATURE OF 40±2°C AND A HUMIDITY OF 90% TO 95% FOR 96 Hr, THEN THE JACK SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITION FOR 1 Hr FOR OTHER PROCEDURES. 放置 40±2°C 的相對濕度為 90~95% 環境中 96 小時後, 再將樣板放在正常環境 1 小時後進行測試.	THERE SHALL BE NO DAMAGE ON APPEARANCE. MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED. 外觀無異常, 滿足於機械, 電器性能.

6.2	HEAT TEST 耐熱試驗	THE JACK SHALL BE STORED AT A TEMPERATURE OF 85±2°C FOR 96 HOURS. AND THEN IT SHALL BE SUBJECTED TO THE CONTROLLED RECOVERY CONDITIONS FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE. 放置在溫度 85±2°C 中測試 96 小時後，再放置正常室溫中 1 小時來測定。	THERE SHALL BE NO DAMAGE ON APPEARANCE. AND NO2-1 OF MECHANICAL CHARACTERISTICS AND ELECTRICAL CHARACTERISTICS. SHALL BE SATISFIED. HOWEVER. CONTACT RESISTANCE:100 mΩ OR LESS INSULATION RESISTANCE. 50 MΩ OR MORE. WITHDRAWAL FORCE: 0.3~3.0kgf. 外觀無異常，滿足於機械，電器性能。 接觸電阻:100 mΩ 以下， 絕緣電阻:50 MΩ 以上， 拔去力:0.3~3.0kgf.	
6.3	COLD TEST 耐寒試驗	THE JACK SHALL BE STORED AT A TEMPERATURE OF-25±3°C FOR 96 HOURS. AND THEN IT SHALL BE SUBJECTED TO THE CONTROLLED RECOVERY CONDITIONS FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE. 放置在溫度-25±3°C 中 96 小時後，再放置常溫常濕中 1 小時來測定。		
6.4	PRACTICAL TEMPERATURE RANGE 使用溫度範圍	-16°C~+60°C. 在-16°C~+60°C溫度內使用。		
7	DURABILITY (耐久性)			
7.1	LIFE TEST 壽命試驗	WITHOUT LOAD; CONNECTION AND DISCONNECTION SHALL BE MADE WITH THE MATING PLUGS AND JACKS FOR 5,000 CYCLES AT A SPEED OF 10 TO 20 CYCLES/MIN. 無負荷： 將結合了的標準 Plug（儘量要近於中心的）在 1 分鐘內以 10~20 的速度，進行 5,000 次插入、拔出。	(1) CONTACT RESISTANCE SHALL BE 100 mΩ OR LESS. (2) INSULATION RESISTANCE. 50 MΩ OR MORE. (3) WITHDRAWAL FORCE :0.3~3.0kgf. (4) MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED (1) 接觸電阻不能超於 100 mΩ. (2) 絕緣電阻:50 MΩ 以上 (3) 拔去力是 0.3~3.0kgf. (4) 其他：滿足於機械、電器性能。	
制 表		校 對	審 核	核 准
黃偉成		劉賢慧	劉賢慧	國志剛

SCHEMATIC



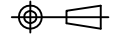
Part N.o	DC-503-01-GP	DC-503-02-GP	DC-503-03-GP
DIA	Ø2.0	Ø2.5	Ø3.0



SING	DESCRIPTION	QTY	MATERIAL	PLATING
F	COVER	1	PBT (BLACK)	
E	TERMINAL 3	1	STAINLESS STEEL	SILVER
D	TERMINAL 2	1	BRASS	SILVER
C	TERMINAL 1	1	BRASS	SILVER
B	PIN	1	BRASS BAR	NICKEL
A	HOUSING	1	PBT (BLACK)	


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DRAWN BY:	REVIEWED BY:	CHECKED BY:	APPROVED BY:
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TOLERANCE CHART: x. ±0.3mm x.x ±0.2mm x.xx ±0.1mm x.xxx ±0.05mm	VIEW: 	UNIT: mm	SCALE: 3.5:1
	PART NAME: DC JACK	DATE: NOV.13.2007	REV: A
	MODEL NO.:	DRAWING NO.:	
DC-503-GP			