OUTLINE OF CHANGES ON THE DOCUMENT				
Version	Description	Page of modification	Issue by	Issue date
A	First released	-	Amy	2005.03.18
B	Adding detailed product data	1-3	Amy	2005.06.20
C	RoHS Compliant	3	Amy	2006.06.30

SPECIFICATION FOR DIP SWITCH

ATTENTION	
Customer shall acknowledge the datasheet by returning "this cover page with authorized signature" before placing order. Lack of acknowledgement or additional response constitutes acceptance of the herein contents. *下單前請將此份"規格書封面簽回",未簽回則視為承認本規格書內容.*	
Approved By	**Entered Date**

ENG. DEPT. APPROVED

CUSTOMER:
PART NO.:
TAIWAY P/N: DP10-DM-08-03
DATE OF ISSUE: 2016 Nov.04
ISSUE BY: Miiko Lin
APPROVED BY: Amy Yen

General

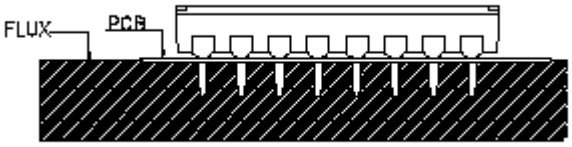
This specification describes DUAL IN-LINE PACKAGE SWITCHES mainly used as signal switch of electric devices with the general requirements of mechanical and electrical characteristics set below.

ELECTRICAL CHARACTERISTICS	CONTACT RATING:	Non-switching 100mA 50VDC Switching 25mA 24VDC
	ELECTRICAL LIFE:	2,000 operations @ 24VDC 25mA After test, contact resistance shall be 100m-ohms max.
	CONTACT RESISTANCE:	To be measured between the two terminals associated with each switch pole. Measurements shall be made with 1 1kHz current contact resistance meter. 50m-ohms max. (initial)
	INSULATION RESISTANCE:	To be measured with an insulation measuring device of 500VDC between all the terminals and between the terminals and the frame for 1 minute ±5 seconds. Min. 100M-ohms
	DIELECTRICAL STRENGTH:	AC 500V (50Hz or 60Hz) being applied between all the adjacent terminals and between the terminal and frame for 1 minute. There shall be no flashover or breakdown
	OPERATING TEMPERATURE:	-20celsius degree to 85celsius degree
	STORAGE TEMPERATURE:	-40celsius degree to 85celsius degree
	SWITCH CAPACITANCE:	To measured with frequency 1MHz ±10kHz. Max. 5pF
MECHANICAL CHARATERISTICS	OPERATING FORCE:	Applied in the direction of operation ON -> OFF OFF -> ON 1,000gf (9.8N) max.
	STOP STRENGTH:	A static load of 1kgf (9.8N) being applied in the operating direction and pulling direction operated for a period of 15 seconds. There shall be no sign of mechanically damage, nor electrically malfunction

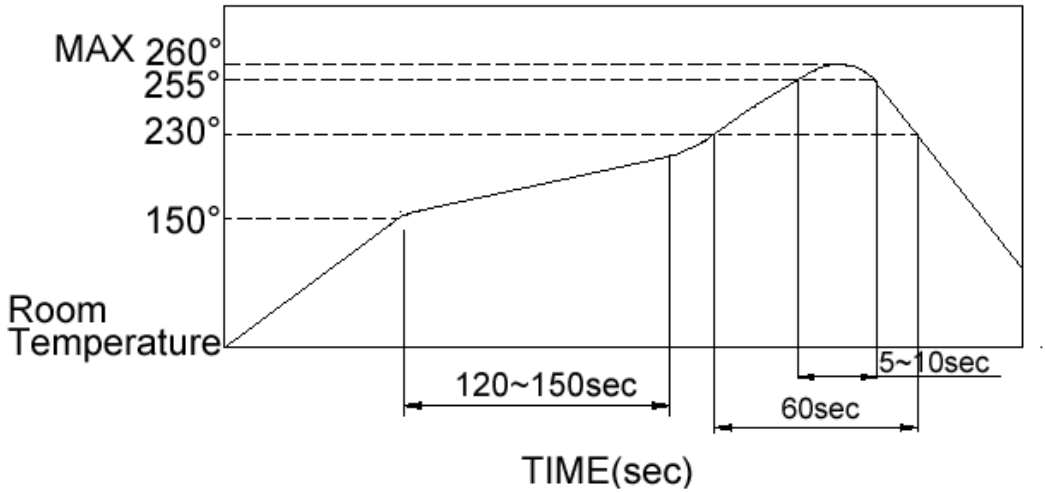
MECHANICAL CHARATERISTICS	VIBRATION TEST:	Shall be vibrated in accordance with Method 201A of MIL-STD-202F. Frequency:10-55-10 Hz 1 minute/cycle Direction:3 vertical directions, including the direction of operation Testing Time:2 hrs each direction. After test, contact resistance shall be 50m-ohms max.
	IMPACT SHOCK:	Shall be shocked in accordance with Method 213B condition A of MIL-STD-202F. Acceleration:50G Action Time:11±1m sec. Testing Direction:6 sides Test Cycle: 3 times in each direction After test, contact resistance shall be 50m-ohms max.
	SOLDER ABILITY:	Soldering temp.: 245±3 Celsius degree Lead-free solder: Sn96.5Ag3Cu0.5 Flux: 5~10sec & Immersion time: 3±0.5sec No anti-soldering and the coverage of dipping into solder must be more than 75%
	HAND SOLDERING:	Max. 350 Celsius degree Continuous soldering time max. 5 seconds
	SOLDERING HEAT RESISTANCE:	Max. 260±5 Celsius degree for max. 5 seconds, and frequency of soldering process 2 times max. PCB Thickness 1.60mm See Page 4 for soldering profile
RELIABILITY	COLD TEST:	Switch for testing being kept in the conditions at -40±3 Celsius degree in temperature for 96 hrs. Then measurement is made after being left in a normal ambient condition for 1 hr. Drop of water must be taken away.

	HEAT TEST:	Switch for testing being kept in the conditions at 85±2 Celsius degree in temperature for 96 hrs. Then switch shall be left in a normal ambient condition for 1 hr then to be measured within 1 hr. Contact resistance shall be 100m-ohms max.
RELIABILITY	HUMIDITY TEST:	Switch for testing being kept in the conditions at 40±2 Celsius degree in temperature and 90~95%RH for 96 hrs. After test, the switch shall be left in a normal ambient condition for 1 hr then to be measured within 1 hr. Contact resistance shall be 100m-ohms max. and insulation resistance shall be 10M-ohms min.
	SALT-SPRAY TEST:	Stored at temperature @ 35(+/-2) Celsius degree, and salt solution concentration of 5% with full air temperature @ 47(+/-3) Celsius degree and air pressure 1.0kg for 24 hrs. The switch shall result no corrosion as well as no apparent changes to its mechanical functions
PACKAGE	RoHS IDENTIFI-CATIONS:	A label marking “RoHS compliant” will be attached to the smallest quantity package or carton box
PRECAUTION IN NANDLING		

- Care shall be taken so that the flux from the upper part of the printed circuit board does not adhere to the switch.
- Don’t clean the switch body except with top tap sealed type, which can only spray of cleaning method from top of switch.
- Please make sure that there is no flux rose over the surface of PCB

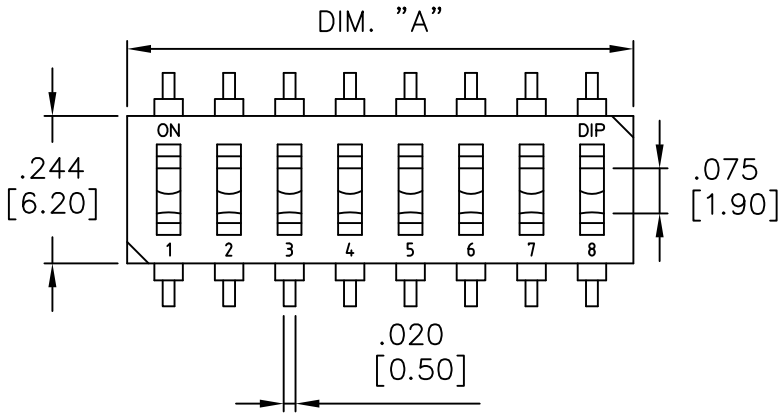


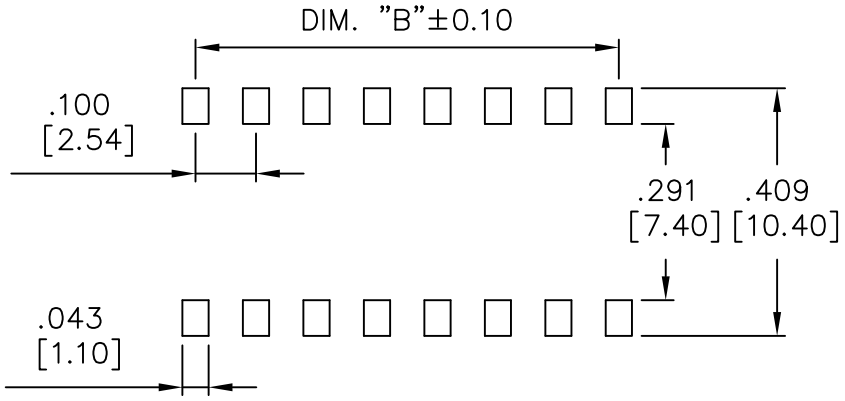
SOLDERING CONDITION:

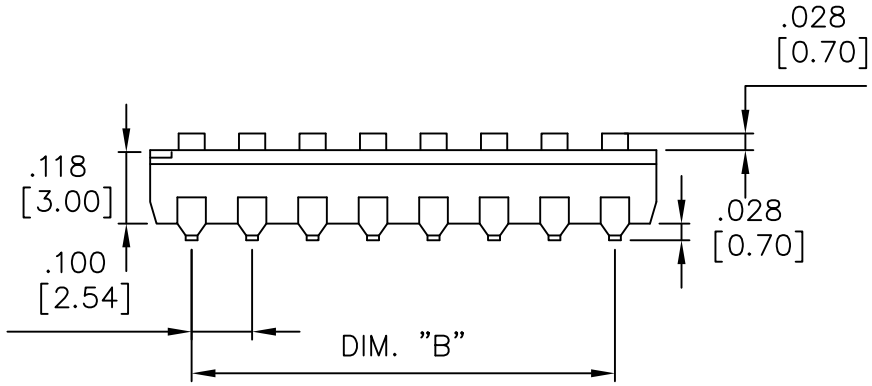


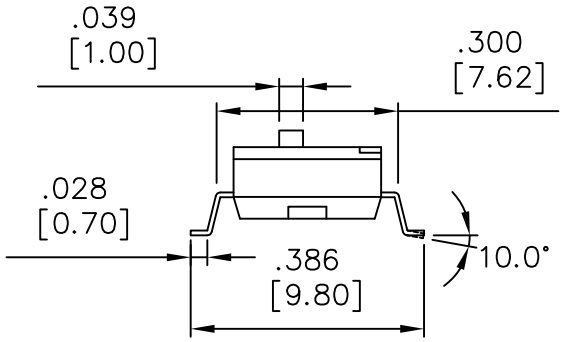
■ The condition mentioned above is the temperature on the Cu foil of the P.C.B surface.
There are cases where board's temperature greatly differs from switch's surface temperature depending on board's material, size, thickness, etc. Care, therefore, should be used not to allow switch's surface temperature to exceed 260℃.

REV. 更改	DESCRIPTION 說明	ENG. 修改人	APPROVE 審核









NO. POS.	NO.	DIM. "A"	DIM. "B"
1	DM-01	3.48(.137)	–
2	DM-02	6.02(.237)	2.54(.100)
3	DM-03	8.56(.337)	5.08(.200)
4	DM-04	11.10(.437)	7.62(.300)
5	DM-05	13.64(.537)	10.16(.400)
6	DM-06	16.18(.637)	12.70(.500)
7	DM-07	18.72(.737)	15.24(.600)
8	DM-08	21.26(.837)	17.78(.700)
9	DM-09	23.80(.937)	20.32(.800)
10	DM-10	26.34(1.037)	22.86(.900)
12	DM-12	31.42(1.237)	27.94(1.100)

SPECIFICATIONS:

1.RATING: NON-SWITCHING: 100mA, 50VDC.
SWITCHING: 25mA, 24VDC
2.CONTACT RESISTANCE: 50mΩ max. at initial.
3.INSULATION RESISTANCE: 100MΩ min. at 500VDC
4.DIELECTRIC STRENGHT: 500VAC/1 MINUTE.
5.MECHANICAL / ELECTRICAL LIFE: 2,000 operations cycles per switch.
6.OPERATION FORCE: 1,000gf max.
7.STROKE: 1.0mm.
8.OPERATING TEMP.: -20°C~+85°C.
9.STORAGE TEMP.: -40°C~+85°C.

ITEM NO. 料號	DP10-DM-xx-03 YDM-xx03

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN MILLIMETERS
ANGULAR TOLERANCE: ±1.0°

DIMENSIONS	TOLERANCE
0.00 TO 10.00mm	±0.20mm
10.01 TO 20.00mm	±0.25mm
20.01 TO 30.00mm	±0.30mm
30.01 I	±0.40mm

MATERIAL

泰瑋電子有限公司
TAIWAY ELECTRONICS COMPONENTS CO.,LTD.

USED 用途	DP10	APPD. 審核	Amy 2002/10/22
FINISH 處理		CHKD. 校對	Amy 2002/10/22
SCALE 比例	3 / 1	UNIT 單位 in(mm)	DR. 製圖 Amy 2002/10/22
TITLE 名稱	DIP SWITCH		
DWG NO. 圖號	DP10-DM-xx-03	SIZE 圖紙	A4
FILE NAME 檔案名稱	DP10-DM-xx-03.dwg	SHEET 張	1 / 1
REV. 更改	1		

DATE: 91.10.22

文號:ER-013b