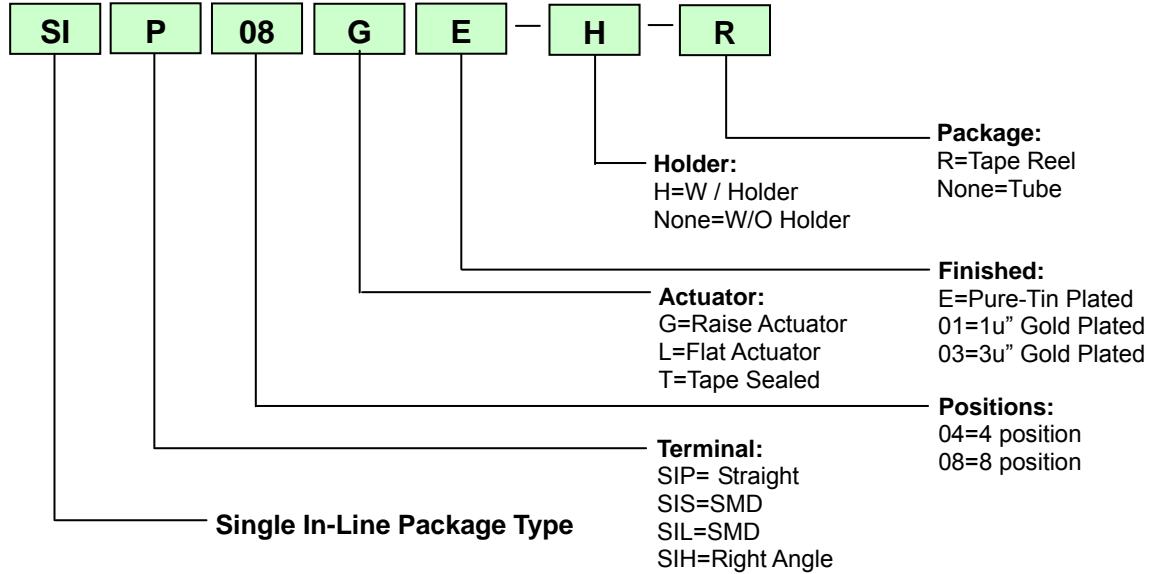


MODEL	SPECIFICATION RoHS Compliant DIP SWITCH	SP-001	Page
SIP series Single In-Line Package			1/8

Ordering Information:



Specifications

◆ Contact Rating	Switching.....	25mA, 24VDC
	Non-Switching.....	100mA, 50VDC
◆ Contact Resistance	Initial.....	50mΩ Max.
	After Life Test.....	100mΩ Max.
◆ Insulation Resistance	.....	100MΩ Min. at 500VDC
◆ Dielectric Strength	.....	500VDC / 1 minute
◆ Operation Force	.....	1,000g max
◆ Travel :	.....	0.9mm
◆ Mechanical Life	.....	5,000 cycles (Min.)
◆ Electrical Life	.....	2,000 cycles / 25mA, 24VDC
◆ Operation Temperature	.....	-40 ~ +85
◆ Storage Temperature	.....	-40 ~ +85

MODEL	SPECIFICATION RoHS Compliant DIP SWITCH	SP-002	Page
SIP series Single In-Line Package			2/8

Soldering Information

◆ **Hand Soldering**

Soldering iron 30W or under at 350 for 3 sec max or at 270 for 5 sec max.

◆ **Reflow Soldering**

(1) Gold-plated series available 2~3 times process

(2) Tin-plated series available 1 time process

(4) Vapor Phase Heating (VPH) switch must with Tape sealed type

◆ **Wave Soldering**

For lead free wave solder simulation of typical components, the solder bath temperature Shall be maintained to 275 .

The hold time in the solder shall be 10 +2/-0 seconds.

◆ Keep all actuators in " OFF " position during soldering and cleaning process.

Classification Reflow Profiles

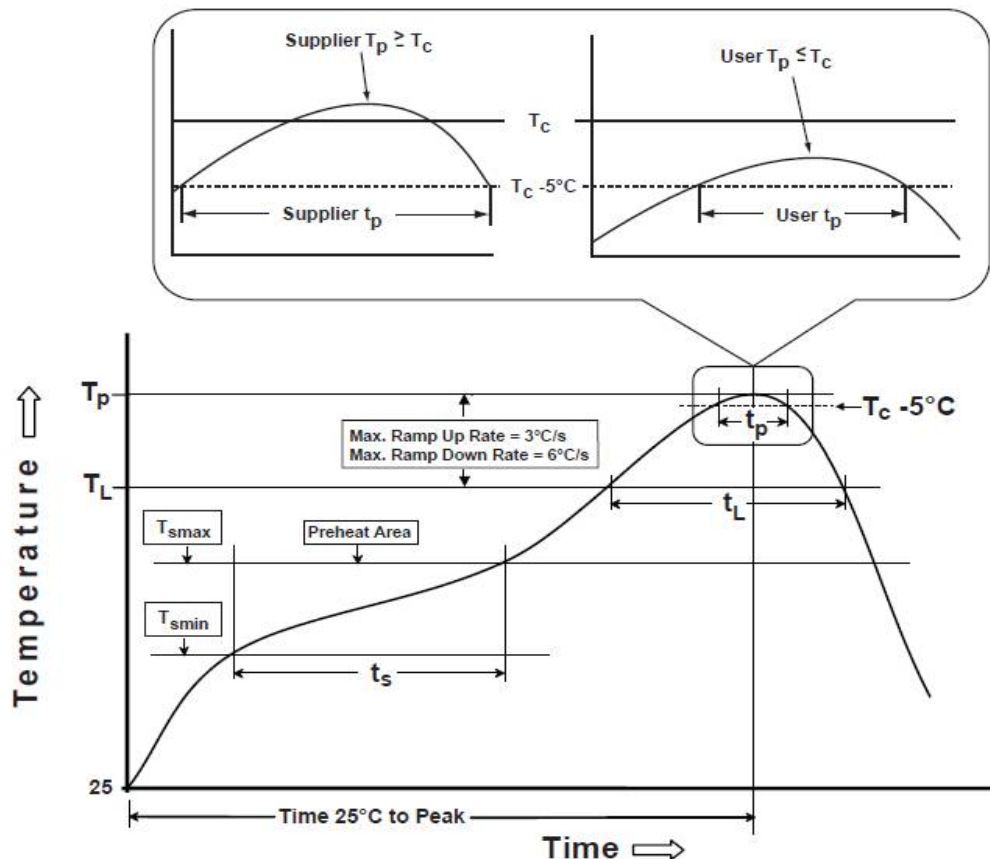
Profile Feature	Pb-Free Assembly
Preheat / Soak	
Temperature Min (T_{smin})	150
Temperature Max (T_{smax})	200
Time(t_s) from (T_{smin} to T_{smax})	60 ~120 seconds
Ramp-up Rate (T_L to T_p)	3 /second max
Liquidous temperature (T_L)	217
Time (t_L) maintained above to T_L	60 ~ 150 seconds
Peak package body temperature (T_p)	For users T_p must not exceed the Classification temp:260 (Package Thickness:>2.5mm) For suppliers T_p must equal or exceed the Classification temp:250 (Package Thickness:>2.5mm)
Time (t_p) within 5 of specified classification Temperature (T_c)	30 seconds
Ramp-Down Rate (T_p to T_L)	6 /second max
Time 25 to Peak temperature	8 minutes max
* Tolerance for peak profile temperature(T_p) is defined as a supplier minimum and a user maximum	

Note 1: All temperatures refer to topside of the package, measured on the package body surface.

Note 2: Time within 5 °C of actual peak temperature (t_p) specified for the reflow profiles is a “supplier” minimum and “user” maximum.

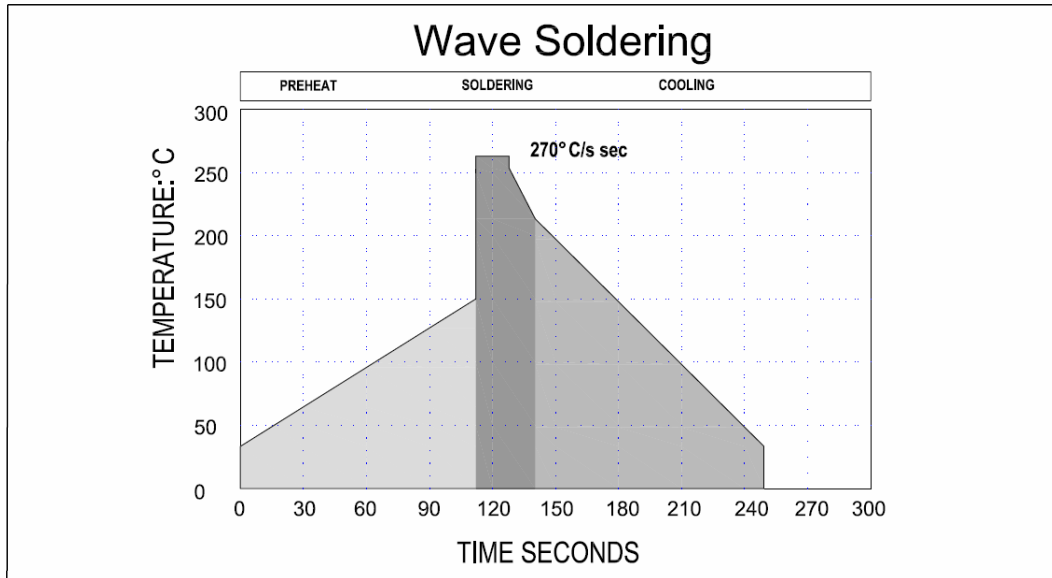
The table copy from IPC/JEDEC J-STD-020 D.1

Reflow Soldering Standard Conditions



MODEL	SPECIFICATION RoHS Compliant DIP SWITCH	SP-004	Page
SIP series Single In-Line Package			4/8

Classification Wave Soldering Profiles



Maximum dwell time in the solder wave (270) shall not exceed 5 seconds.

Switch Operation and Taping

- (1) Use tweezers or ball-point pen for operation.
- (2) Flux cleaning should be done without removing the Tape.
- (3) If the tape is removed, it adheres less than before when it is placed back on, possibly causing flux inflow
- (4) Do Not Remove Tape sealed before Reflow processing
- (5) Ultrasonic cleaning not re-commended.

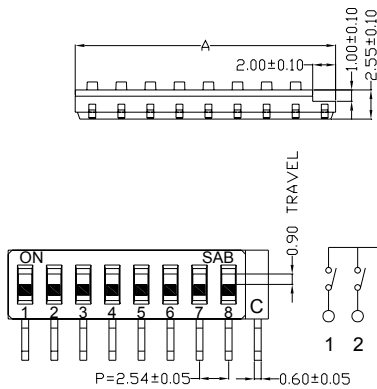
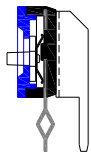
All switches must set in OFF position when through Soldering process.
Any flux enters the switch may influence contact function.

MODEL	SPECIFICATION	SP-005	Page
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RoHS Compliant DIP SWITCH			

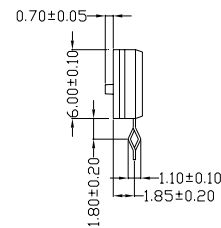
Materials:

- ◆ CoverThermoplastic (UL 94V-0), Black
- ◆ BaseThermoplastic (UL 94V-0), Black
- ◆ Actuator SIS/SIL.....Thermoplastic (UL 94V-0), White
SIP/SIH.....Thermoplastic (UL 94V-0), White
- ◆ Terminal ContactGold Plated / Pure-Tin Plated
- ◆ Movable ContactGold Plated / Pure-Tin Plated
- ◆ Terminal40u" +/-10u" Nickel Cover 1u" Gold-Plated
.....40u" +/-10u" Nickel Cover 3u" Gold-Plated
.....40u" +/-10u" Nickel Cover (Pure) Tin-Plated
- ◆ TapePolyimide Film

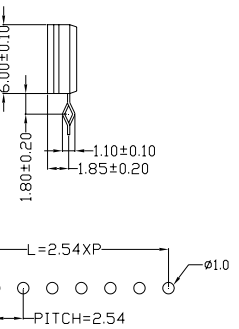
SIP



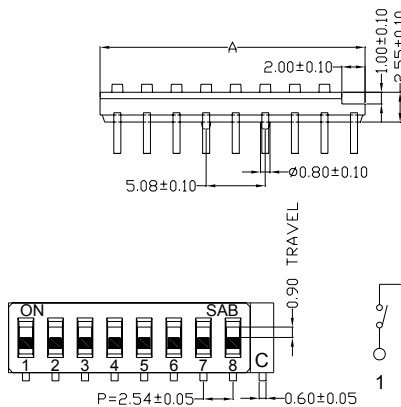
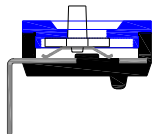
G Type



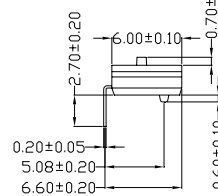
L Type



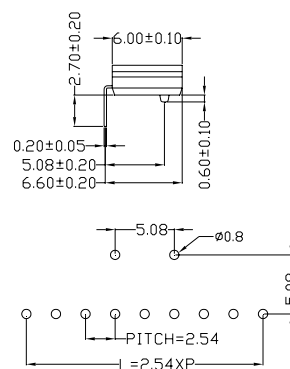
SIH



G Type

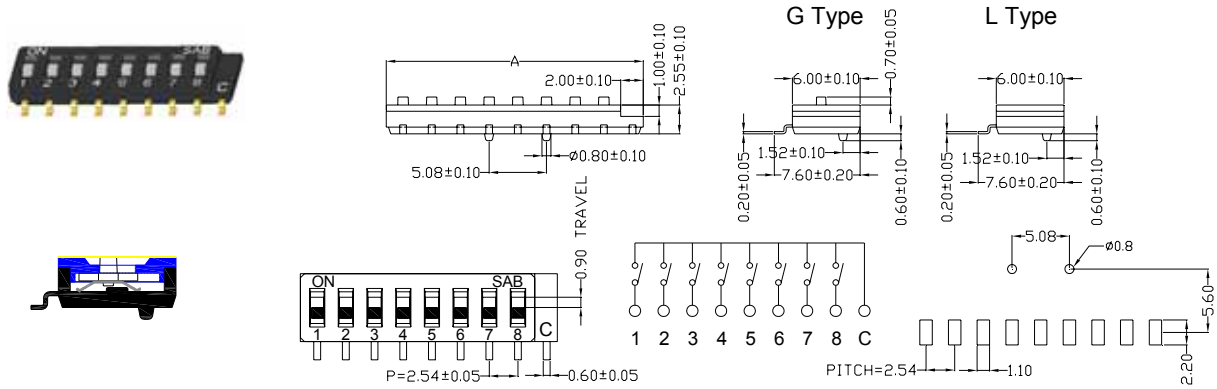


L Type

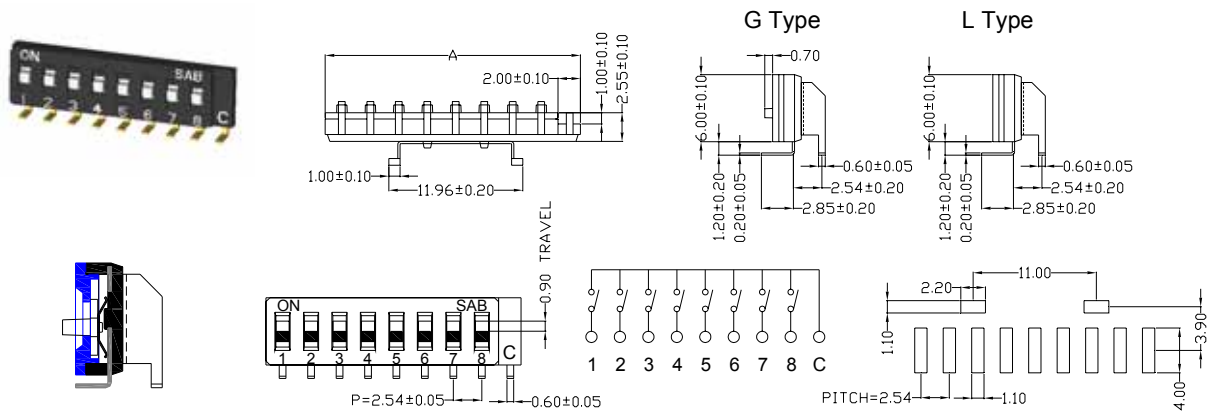


MODEL	SPECIFICATION	SP-006	Page
SIP series Single In-Line Package			RoHS Compliant DIP SWITCH	6/8

SIS



SIL



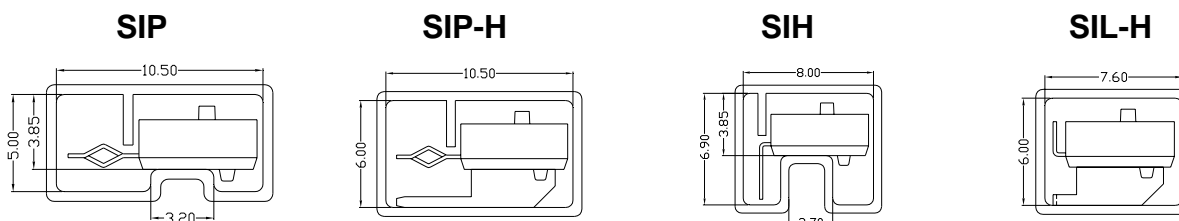
MODEL	SPECIFICATION RoHS Compliant DIP SWITCH	SP-007	Page
SIP series Single In-Line Package			7/8

Part Number Table

No. Pos.	Dim. "A"	Straight Pure-Tin Lead Raise Actuator Tube Package W/ Holder	SMD 1u" Gold Lead Flat Actuator Tube Package W/O Holder	SMD 1u" Gold Lead Tape Sealed Tape Reel W/O Holder	Right Angle 3u" Gold Lead Raise Actuator Tube Package W/ Holder
4	12.60	SIP04GE-H	SIS04L01	SIL04T01-R	SIH04G-H
6	17.68	SIP06GE-H	SIS06L01	SIL06T01-R	SIH06G-H
8	22.76	SIP08GE-H	SIS08L01	SIL08T01-R	SIH08G-H
10	27.84	SIP10GE-H	SIS10L01	SIL10T01-R	SIH10G-H

Tube Package:

POLE	4	6	8	10
TUBE	41	29	23	8
BOX	8200	5800	4600	1600
CTN 1	16400	11600	9200	3200



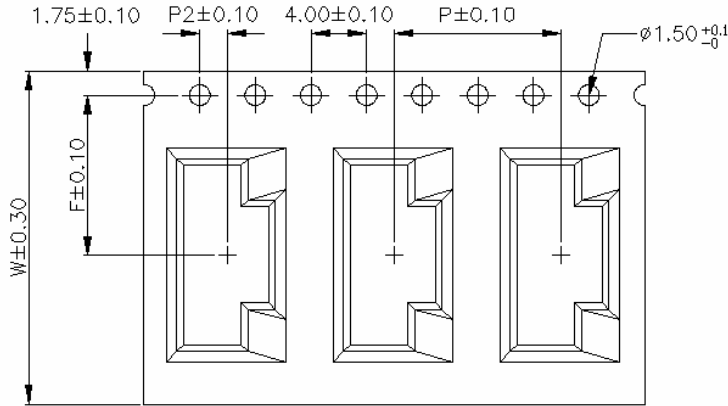
Tape & Reel package

SIL

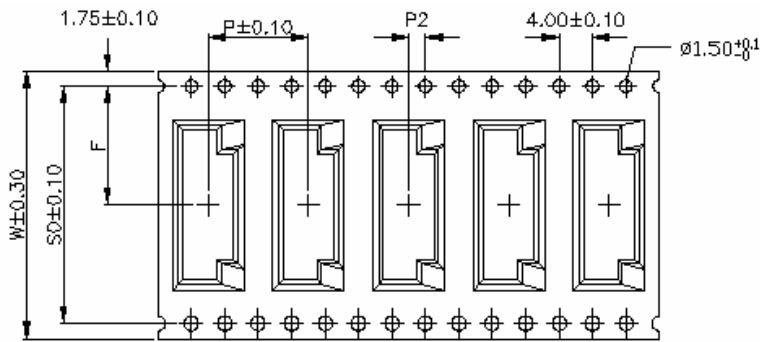
POLE	04	06	08	10
Pitch(mm)	12	12	12	12
Width(mm)	24	32	44	44
G type / Reel	700	700	700	700
L type / Reel	700	700	700	700

MODEL	SPECIFICATION	SP-008	Page
SIP series Single In-Line Package			RoHS Compliant DIP SWITCH	8/8

SIL04



SIL06/08/10



Box Dimension:

- ◆ Tube57.0cm × 13.0cm × 12.5cm
- ◆ Tape & Reel34.5cm x 34.5cm x 15.0cm

Carton Dimension:

- ◆ Tube CTN 1 / 2 Boxes.....58.5cm x 29.0cm x 15.0cm
- CTN 2 / 4 Boxes.....58.5cm x 28.0cm x 27.0cm
- ◆ Tape & Reel36.0cm x 27.5cm x 37.0cm