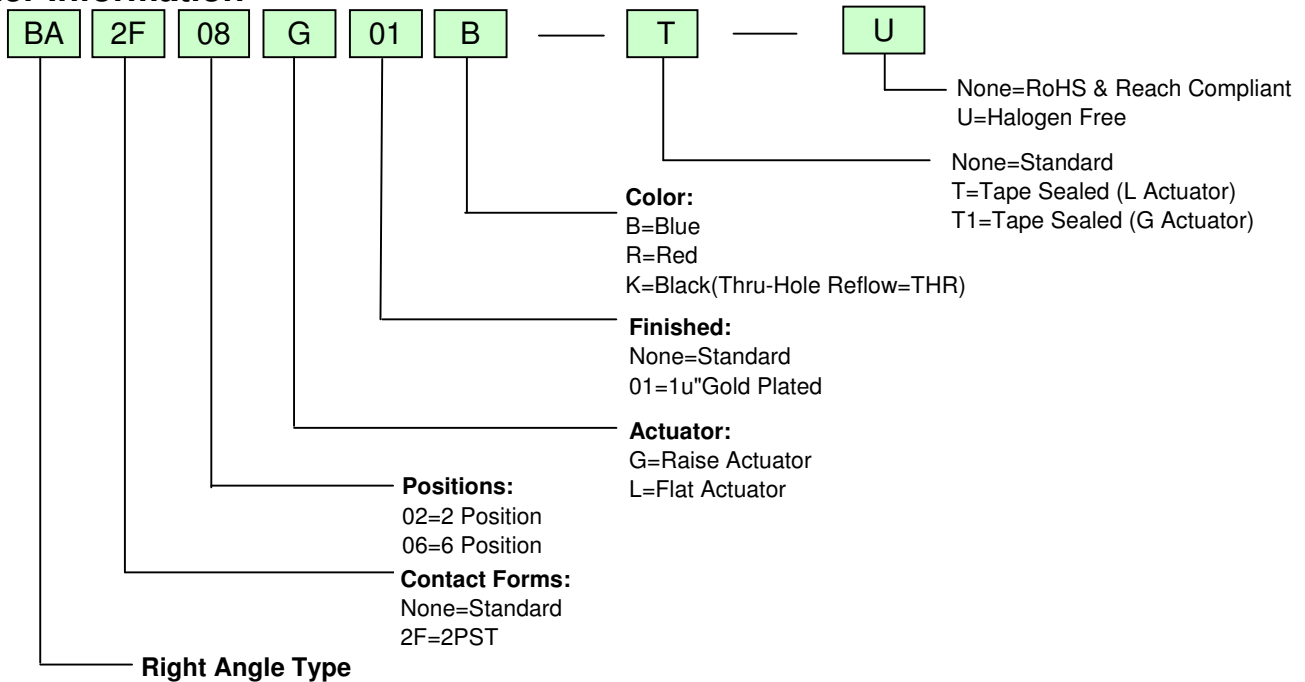


MODEL	SPECIFICATION DIP SWITCH RoHS&REACH Compliant / Halogen Free	SP-001	Page
BA series Right Angle Type			1/5

Order Information



Specifications

◆ Contact Rating	Switching.....25mA,24VDC
	Non-Switching.....100mA,50VDC
◆ Contact Resistance	Initial.....50mΩ/Max
	After Reliability Test.....100mΩ/Max
◆ Insulation Resistance	.....100MΩ/Min. at 500 VDC
◆ Dielectric Strength	.....500VDC/ 1 mintue
◆ Operating Force	.....1,000g/max
◆ Travel	.....1.8mm
◆ Mechanical Life	.....5,000 cycles (Min.)
◆ Electrical Life	.....2,000 cycles /25mA,24VDC
◆ Operating Temperature	THR.....-40°C ~ +105°C
	THT.....-40°C ~ +85°C
◆ Storage Temperature	.....-40°C ~ +85°C

Soldering Information

- ◆ **Hand Soldering**
Soldering iron of 30W or under at 350°C for 3 sec. max. or at 270°C for 5 sec. max.
- ◆ **Reflow Soldering:**
Only for THR type which allows 1-time reflow soldering.
The peak temperature of the oven should be 250°C max.
- ◆ **Wave Soldering**
For lead free wave solder simulation of typical components, the solder bath temperature shall be maintained to at 270°C max./ 5~10 seconds.
- ◆ **Keep all actuators in "OFF" position during soldering and cleaning processes.**

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Classification Reflow Profiles

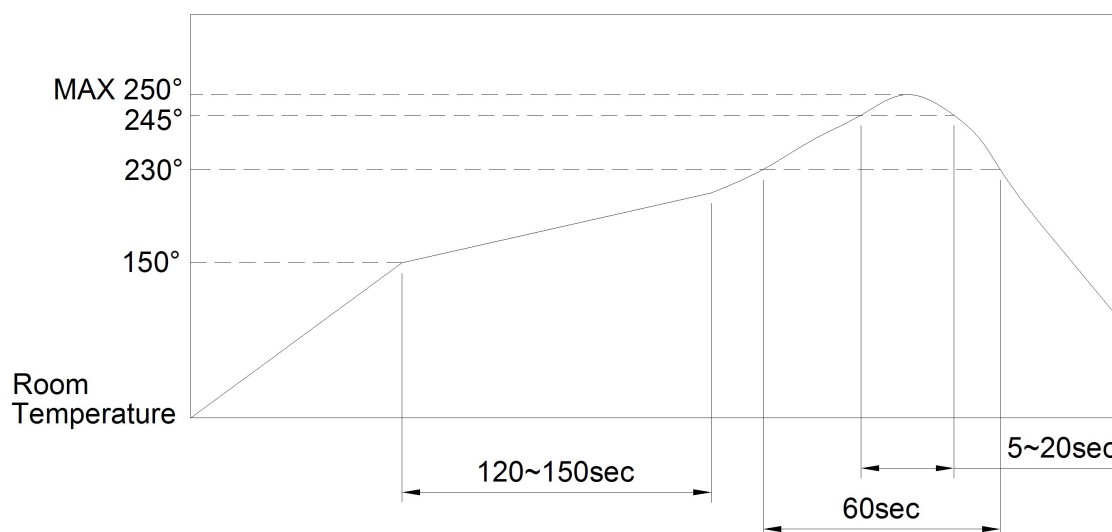
Profile Feature	Pb-Free Assembly
Preheat / Soak	
Temperature Min (T_{Smin})	150°C
Temperature Max (T_{Smax})	200°C
Time(ts) from (T_{Smin} to T_{Smax})	60 ~120 seconds
Ramp-up Rate (T_L to T_p)	3°C/second max
Liquidous temperature (T_L)	217°C
Time (t_L) maintained above to T_L	60 ~ 150 seconds
Peak package body temperature (T_p)	For users T_p must not exceed the Classification temp:250°C (Package Thickness>2.5mm) For suppliers T_p must equal or exceed the Classification temp:250°C (Package Thickness>2.5mm)
Time (t_p) within 5°C of specified classification Temperature (T_c)	30 seconds
Ramp-Down Rate (T_p to T_L)	6°C/second max
Time 25°C 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.

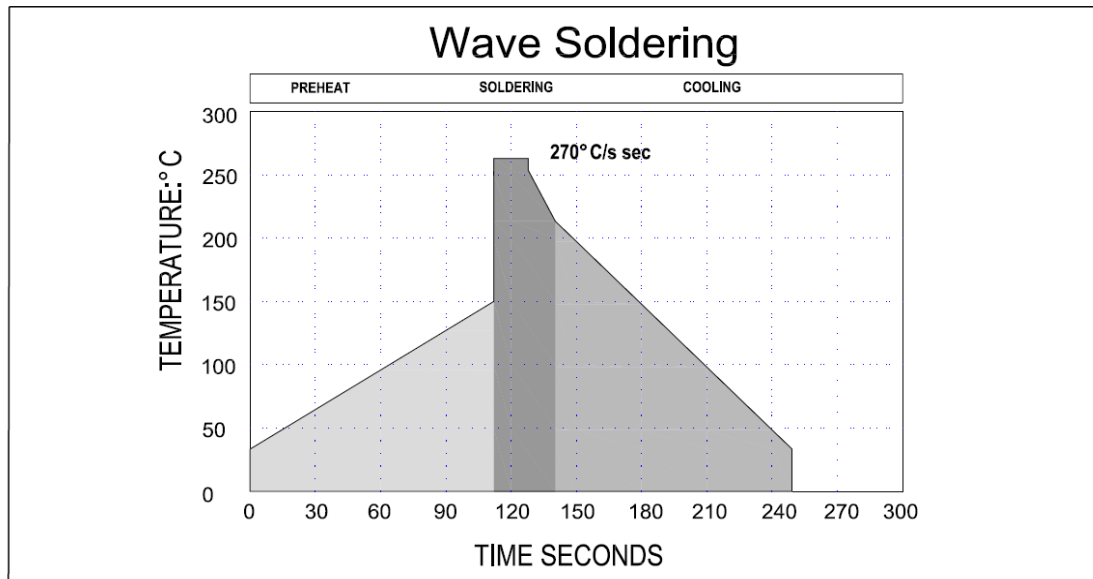
Source: IPC/JEDEC J-STD-020D.1

Recommended Reflow Soldering



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Recommended Wave Soldering Profiles



Maximum dwell time in the solder wave (270°C) shall not exceed 10 seconds.

Switch Operation and Taping

- (1) Use tweezers 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) Ultrasonic cleaning not recommended without Tape sealed.

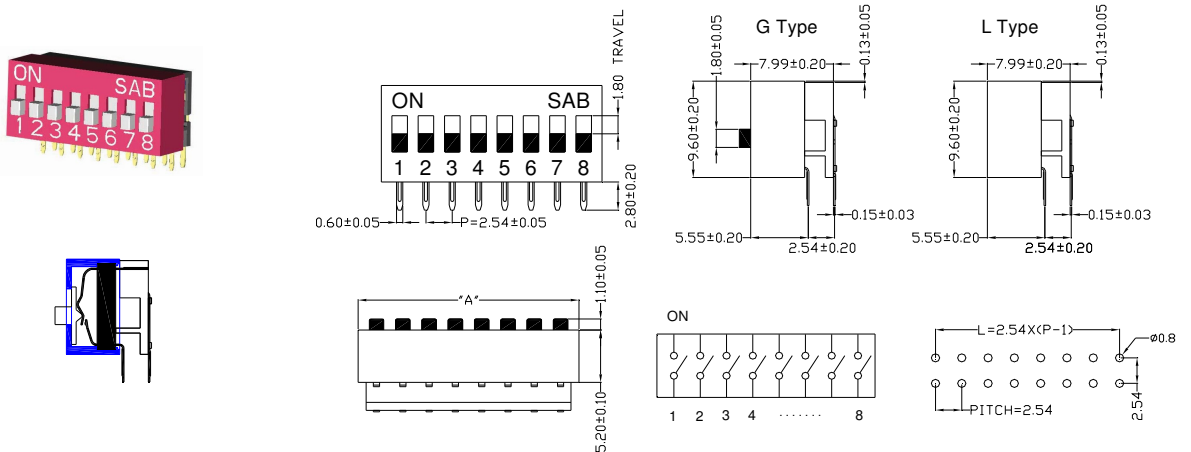
- ※ All switches must set in OFF position when through Soldering process.
- ※ Any flux enters the switch may influence contact function.

MODEL	SPECIFICATION		Page
BA series Right Angle Type	DIP SWITCH RoHS&REACH Compliant / Halogen Free	SP-004	4/5

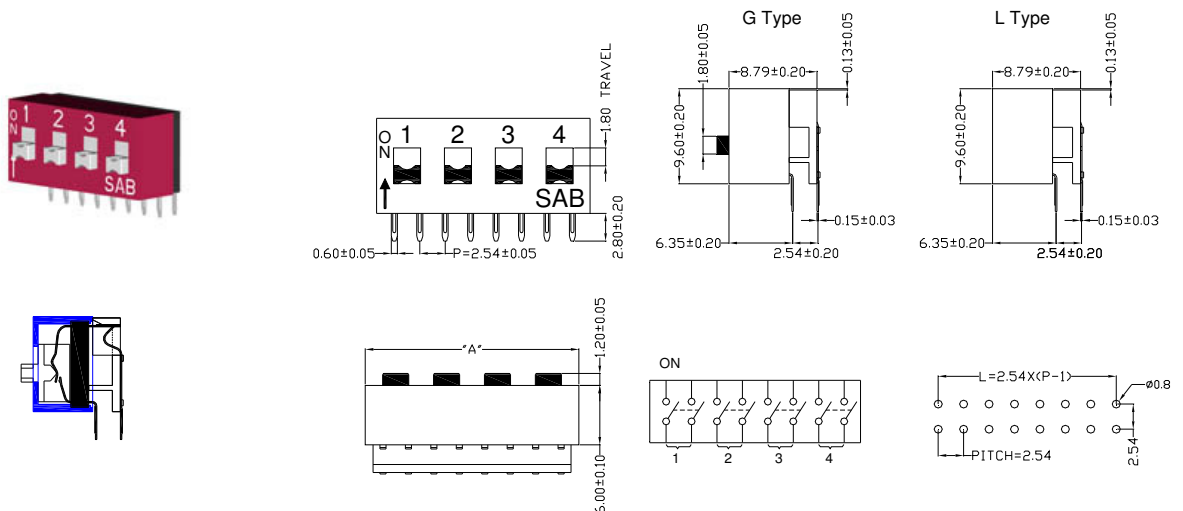
Materials:

◆ Cover	RoHS&REACH Compliant..... Thermoplastic UL 94V-0, Red/ Blue/ Black(THR) Halogen Free..... Thermoplastic UL 94-HB, Red/ Blue Halogen Free..... Thermoplastic UL 94V-0, Black(THR)
◆ Base	..... Thermoplastic UL 94-HB, Black Thermoplastic UL 94V-0, Black(THR)
◆ Actuator	..... Thermoplastic UL 94-HB, White/ White(THR)
◆ Support	..... Thermoplastic UL 94-HB, Black Thermoplastic UL 94V-0, Black(THR)
◆ Contact	.....40u" +/-10u" Nickel Cover 1u" Gold-Plated
◆ Terminal	Standard.....40u" +/-10u" Nickel Cover (Pure) Tin-Plated 01 type.....40u" +/-10u" Nickel Cover 1u" Gold-Plated
◆ TapePolyimide Film

BA



BA2F



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Part Number Table:

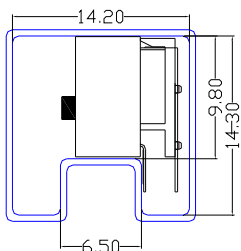
BA

BA2F

No. Pos.	Dim. "A"	Raise Actuator Red Standard Tube Package	Flat Actuator Blue Standard Tube Package	Raise Actuator Red 1u" Gold Lead Tube Package
2	6.08	BA02GR	BA02LB	BA02G01R
3	8.62	BA03GR	BA03LB	BA03G01R
4	11.16	BA04GR	BA04LB	BA04G01R
5	13.70	BA05GR	BA05LB	BA05G01R
6	16.24	BA06GR	BA06LB	BA06G01R
7	18.78	BA07GR	BA07LB	BA07G01R
8	21.32	BA08GR	BA08LB	BA08G01R
9	23.86	BA09GR	BA09LB	BA09G01R
10	26.40	BA10GR	BA10LB	BA10G01R
12	31.48	BA12GR	BA12LB	BA12G01R

No. Pos.	Dim. "A"	Raise Actuator Red Tube Package
1	6.08	BA2F01GR
2	11.16	BA2F02GR
3	16.24	BA2F03GR
4	21.32	BA2F04GR
5	26.40	BA2F05GR
6	31.48	BA2F06GR

Tube Package



BA

POLE	1	2	3	4	5	6	7	8	9	10	12
TUBE	148	85	61	47	38	32	28	24	22	20	16
BOX	7252	4165	2989	2303	1862	1568	1372	1176	1078	980	784
CTN 1	14504	8330	5978	4606	3724	3136	2744	2352	2156	1960	1568
CTN 2	29008	16660	11956	9212	7448	6272	5488	4704	4312	3920	3136

BA2F

POLE	1	2	3	4	5	6
TUBE	85	47	32	24	20	16
BOX	4165	2303	1568	1176	980	784
CTN 1	8330	4606	3136	2352	1960	1568
CTN 2	16660	9212	6272	4704	3920	3136

Box Dimension:

◆ Tube57.0cm × 13.0cm × 12.5cm

Carton Dimension:

◆ Tube
 2 Boxes.....58.5cm x 29.0cm x 15.0cm
 4 Boxes.....58.5cm x 28.0cm x 27.0cm