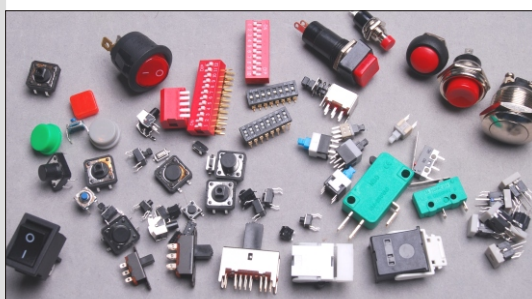


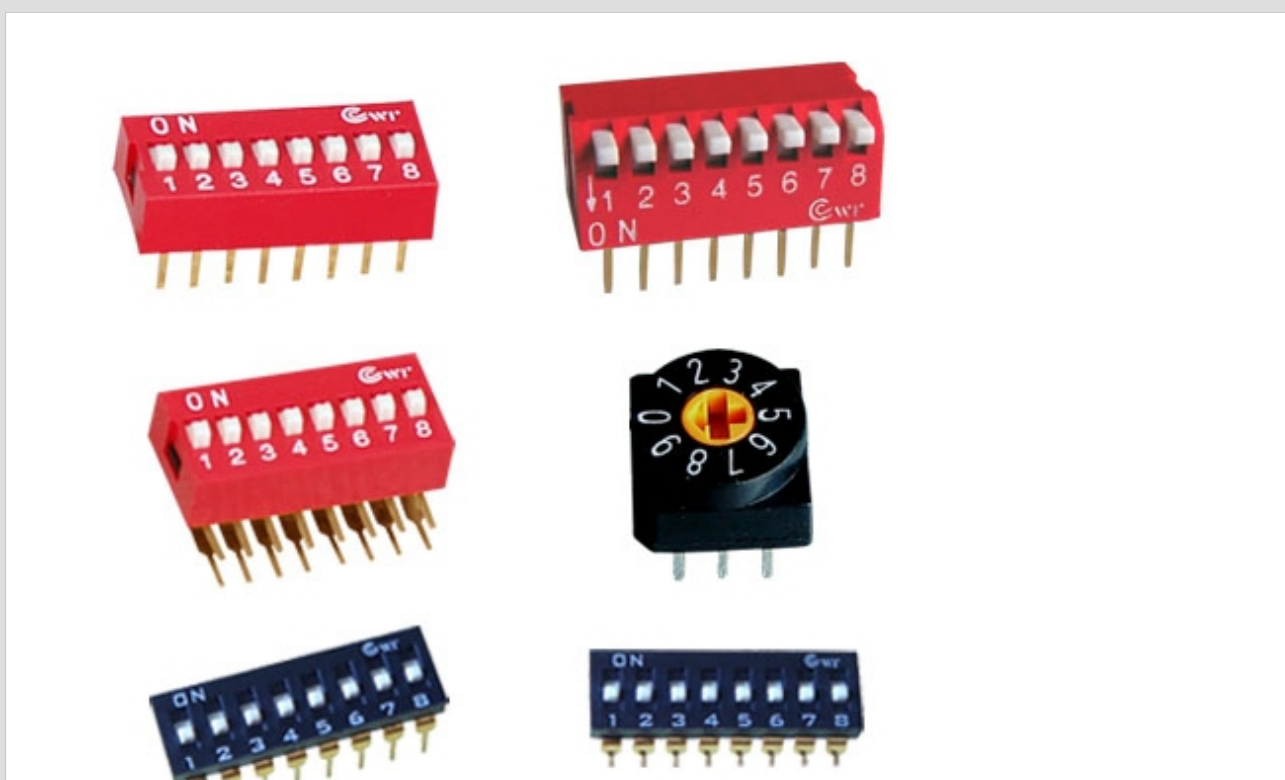
**KLS**

### 3-Buttons,Switches-Компоненты коммутации: выключатели, переключатели, кнопки



- 3-1 **DIP switch**
- 3-2 Tactile switch
- 3-3 Hook switch
- 3-4 Magnetic reed switches
- 3-5 Snap Action switches/Micro switches
- 3-6 Navigation joystick switches
- 3-7 Pushbutton switches
- 3-8 Rocker switches
- 3-9 Rotary switches
- 3-10 Slide switches

More . . .



# Switch

## DIP Switch Series

### KLS7-DS-Side Type Dip Switch Series

#### SPECIFICATIONS

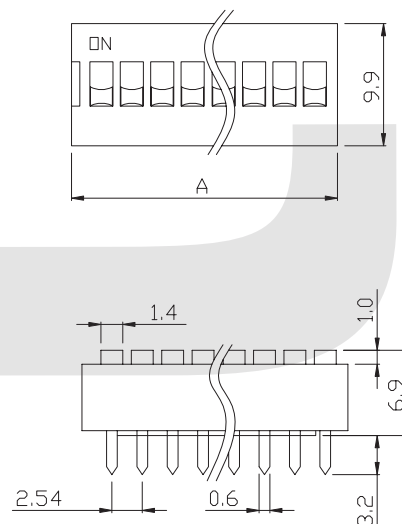
Mechanical life: 2000 operations per switch  
Operation Force :  $\leq 9.8\text{N}$  max.  
Stroke: 2.0mm  
Operation Temp:  $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$   
Electrical life: 2000 operations per switch-24 VDC, 25mA  
Contact Resistance: 50m max. at initial  
Non-Switching Rating: 100mA, 50VDC  
Switching Rating: 25mA, 24VDC  
Circuit: Single pole single throw

#### Soldering and Cleaning Processes

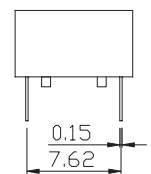
Keep all switch contacts in their "OFF" position for all operations



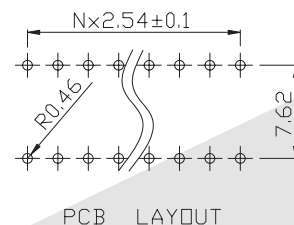
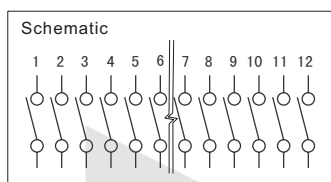
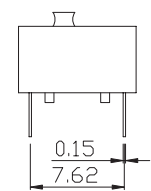
Model No.	No. Pos.	A
DS-01	1	4.10
DS-02	2	6.64
DS-03	3	9.18
DS-04	4	11.72
DS-05	5	14.26
DS-06	6	16.80
DS-07	7	19.34
DS-08	8	21.88
DS-09	9	24.42
DS-10	10	26.96
DS-12	12	32.04



DSR Type



DS Type



## ORDER INFORMATION

**KLS7-DS - XX - R - 0 0**

Part Number

DS : Bulge Type Dip Switch  
DSR: Recessed Type Dip Switch  
Number of Pos.: 01~12 Pos.

Packaging: 0=Tube 1=Tape

0: Non-sealed  
1: With sealed  
Color: R=Red B=Blue

# Switch

## DIP Switch Series

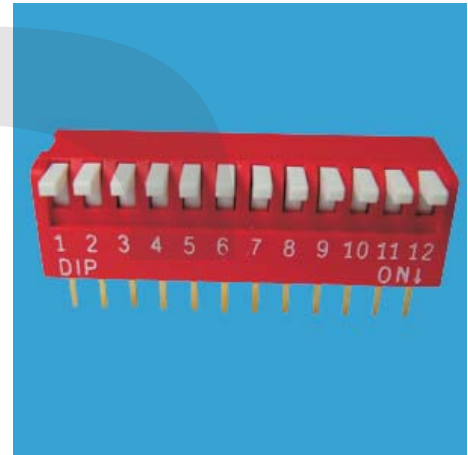
### KLS7-DP-Piano Type Dip Switch Series

#### SPECIFICATIONS

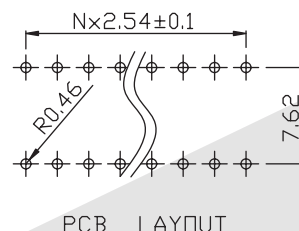
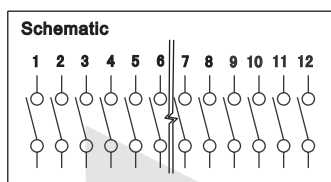
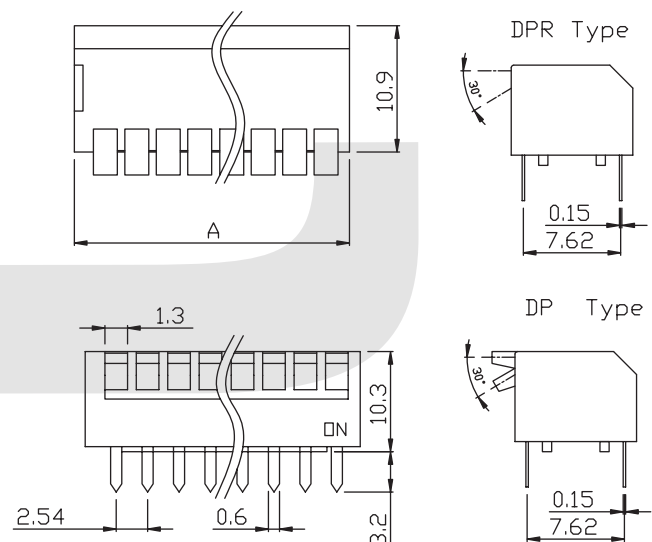
Mechanical life: 2000 operations per switch  
Operation Force :  $\leq 9.8\text{N}$  max.  
Stroke: 2.0mm  
Operation Temp:  $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$   
Electrical life: 2000 operations per switch-24 VDC, 25mA  
Contact Resistance: 50m max. at initial  
Non-Switching Rating: 100mA, 50VDC  
Switching Rating: 25mA, 24VDC  
Circuit: Single pole single throw

#### Soldering and Cleaning Processes

Keep all switch contacts in their "OFF" position for all operations



Model No.	No. Pos.	A
DP-01	1	4.10
DP-02	2	6.64
DP-03	3	9.18
DP-04	4	11.72
DP-05	5	14.26
DP-06	6	16.80
DP-07	7	19.34
DP-08	8	21.88
DP-09	9	24.42
DP-10	10	26.96
DP-12	12	32.04



## ORDER INFORMATION

**KLS7-DP - XX - R - 0 0**

Part Number

DP : Bulge Type Dip Switch  
DPR: Recessed Type Dip Switch  
Number of Pos.: 01~12 Pos.

Packaging: 0=Tube 1=Tape

0: Non-sealed  
1: With sealed  
Color: R=Red B=Blue

## DIP Switch Series

### KLS7-DA-Right Angle Type Dip Switch Series

#### SPECIFICATIONS

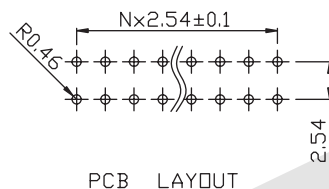
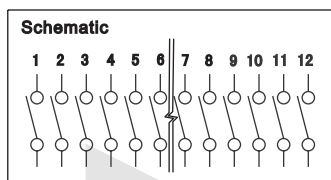
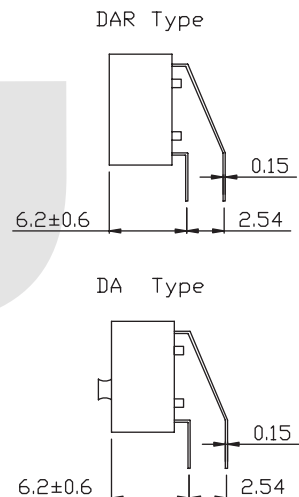
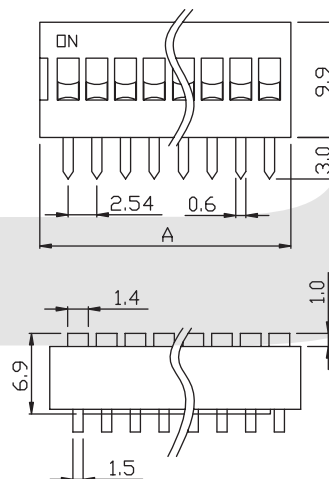
Mechanical life: 2000 operations per switch  
Operation Force :  $\leq 9.8\text{N}$  max.  
Stroke: 2.0mm  
Operation Temp:  $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$   
Electrical life: 2000 operations per switch-24 VDC, 25mA  
Contact Resistance: 50m max. at initial  
Non-Switching Rating: 100mA, 50VDC  
Switching Rating: 25mA, 24VDC  
Circuit: Single pole single throw

#### Soldering and Cleaning Processes

Keep all switch contacts in their "OFF" position for all operations



Model No.	No. Pos.	A
DA-01	1	4.10
DA-02	2	6.64
DA-03	3	9.18
DA-04	4	11.72
DA-05	5	14.26
DA-06	6	16.80
DA-07	7	19.34
DA-08	8	21.88
DA-09	9	24.42
DA-10	10	26.96
DA-12	12	32.04



## ORDER INFORMATION

**KLS7-DA-XX-R-00**

Part Number

DA : Bulge Type Dip Switch

DAR: Recessed Type Dip Switch

Number of Pos.: 01~12 Pos.

Packing: 0=Tube 1=Tape

0: Non-sealed

1: With sealed

Color: R=Red B=Blue N=Black

# Switch

## DIP Switch Series

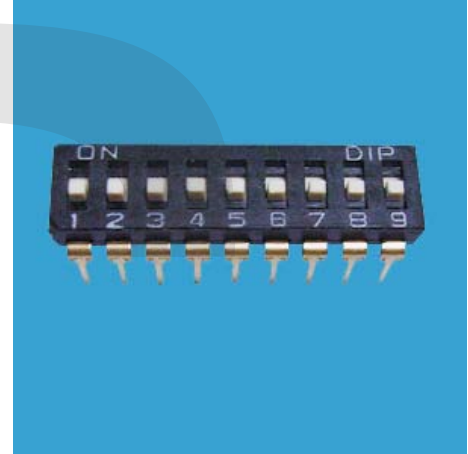
### KLS7-KM DIP Switch Series

#### SPECIFICATIONS

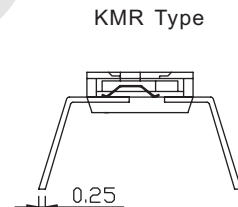
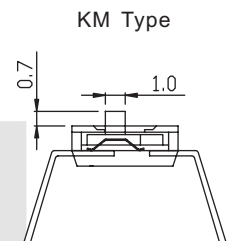
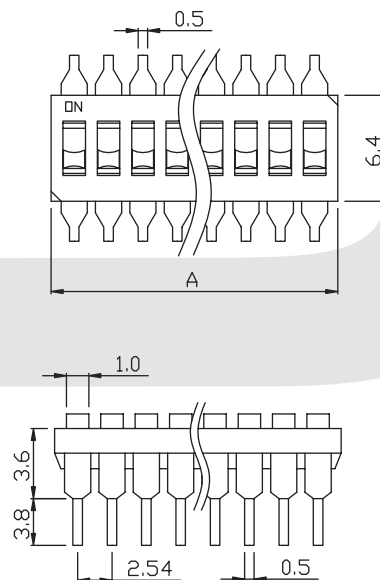
Mechanical life: 2000 operations per switch  
Operation Force :  $\leq 9.8\text{N}$  max.  
Stroke: 2.0mm  
Operation Temp:  $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$   
Electrical life: 2000 operations per switch-24 VDC, 25mA  
Contact Resistance: 50m max. at initial  
Non-Switching Rating: 100mA, 50VDC  
Switching Rating: 25mA, 24VDC  
Circuit: Single pole single throw

#### Soldering and Cleaning Processes

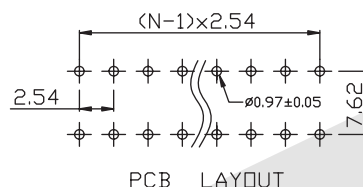
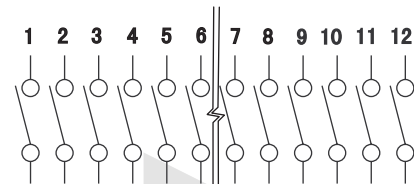
Keep all switch contacts in their "OFF" position for all operations



Model No.	No. Pos.	A
KM-02	2	6.02
KM-03	3	8.56
KM-04	4	11.10
KM-05	5	13.64
KM-06	6	16.18
KM-07	7	18.72
KM-08	8	21.26
KM-09	9	23.86
KM-10	10	26.34
KM-12	12	31.42



#### Schematic



## ORDER INFORMATION

**KLS7-KM -XX -N -0 0**

Part Number

KM: Bulge Type Dip Switch

KMR: Recessed Type Dip Switch

Number of Pos.: 02~12 Pos.

Packaging: 0=Tube 1=Tape

0:Non-sealed

1:With sealed

Color: N=Black

## DIP Switch Series

### KLS7-KL-SMT Type DIP Switch Series

#### SPECIFICATIONS

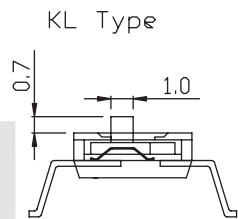
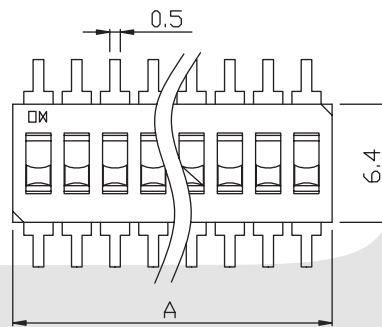
Mechanical life: 2000 operations per switch  
Operation Force :  $\leq 9.8\text{N}$  max.  
Stroke: 2.0mm  
Operation Temp:  $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$   
Electrical life: 2000 operations per switch-24 VDC, 25mA  
Contact Resistance: 50m max. at initial  
Non-Switching Rating: 100mA, 50VDC  
Switching Rating: 25mA, 24VDC  
Circuit: Single pole single throw

#### Soldering and Cleaning Processes

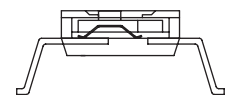
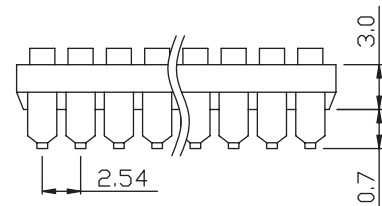
Keep all switch contacts in their "OFF" position for all operations



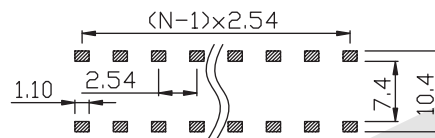
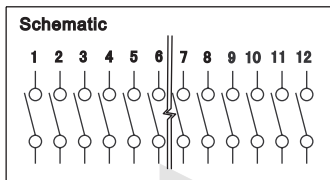
Model No.	No. Pos.	A
KL-02	2	6.02
KL-03	3	8.56
KL-04	4	11.10
KL-05	5	13.64
KL-06	6	16.18
KL-07	7	18.72
KL-08	8	21.26
KL-09	9	23.86
KL-10	10	26.34
KL-12	12	31.42



KL Type



KLR Type



PCB LAYOUT

## ORDER INFORMATION

**KLS7-KL - XX - N - 0 0**

Part Number

KL : Bulge Type Dip Switch

KLR: Recessed Type Dip Switch

Number of Pos.: 02~12 Pos.

Packaging: 0=Tube 1=Tape

0: Non-sealed

1: With sealed

Color: N=Black

# Switch

## DIP Switch Series

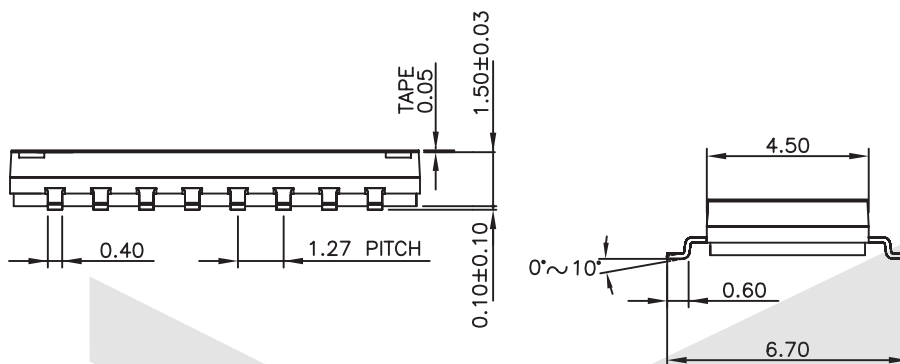
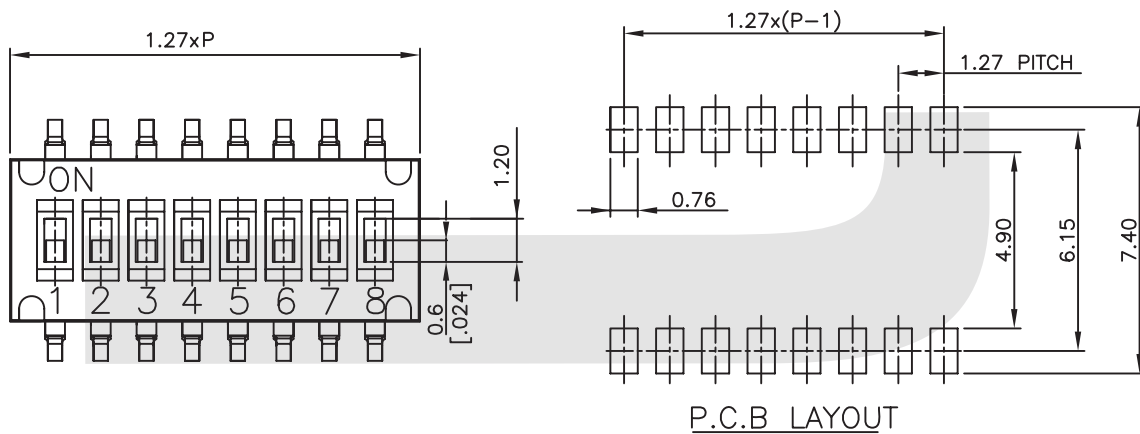
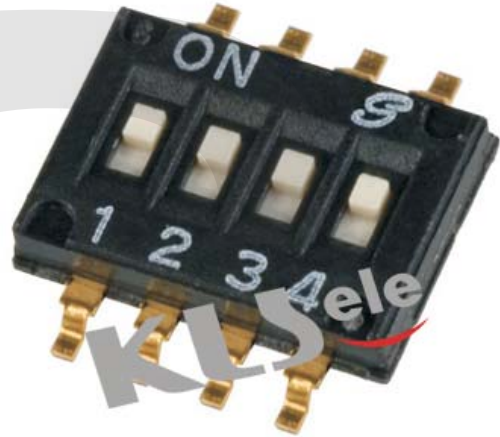
### KLS7-KPR SMT Type DIP Switch Series

#### SPECIFICATIONS

Mechanical life: 2000 operations per switch  
Operation Force :  $\leq 9.8\text{N}$  max.  
Stroke: 2.0mm  
Operation Temp:  $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$   
Electrical life: 2000 operations per switch-24 VDC, 25mA  
Contact Resistance: 50m max. at initial  
Non-Switching Rating: 100mA, 50VDC  
Switching Rating: 25mA, 24VDC  
Circuit: Single pole single throw

#### Soldering and Cleaning Processes

Keep all switch contacts in their "OFF" position for all operations



## ORDER INFORMATION

KLS7-KPR-XX-N-00

Part Number

KPR: Recessed Type Dip Switch

Number of Pos.: 02~12 Pos.

Packaging: 0=Tube 1=Tape

0: Non-sealed

1: With sealed

Color: N=Black



# Switch

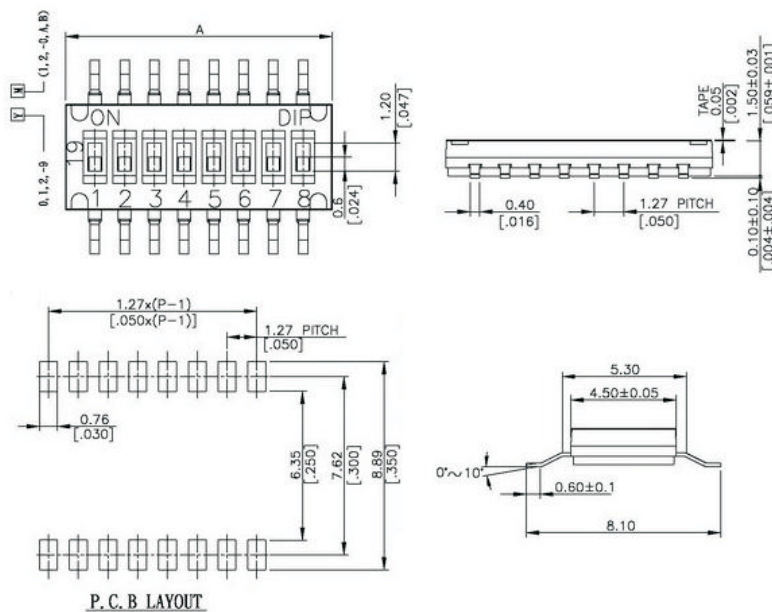
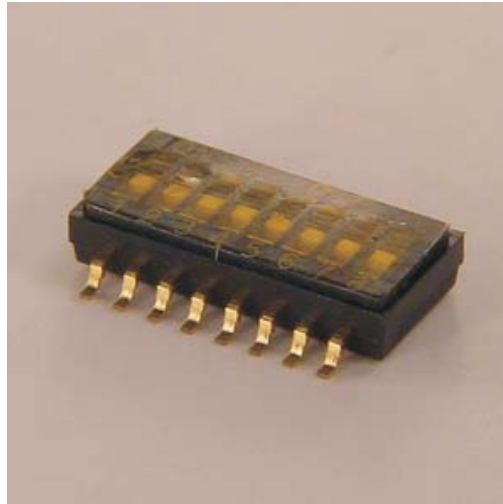
## DIP Switch Series

### KLS7-KPH(1.27MM)

Rating: 25mA 24 VDC  
 Half Pitch Type  
 Pin Pitch: 1.27mm  
 Top Tape Sealed  
 Operation Force : 500gf max.  
 Dielectric Strength: AC 300V/Minute  
 Insulation Resistance: 100 MΩ Min 500V DC  
 Contact Resistance: 100MΩ Max.  
 Operation Temp: -40/+85  
 Electrical life: 1000 operations  
 Mechanical life: 1000 operations

#### FUNCTION:

2, 4, 6, 8, 10 positions



## ORDER INFORMATION



## Switch

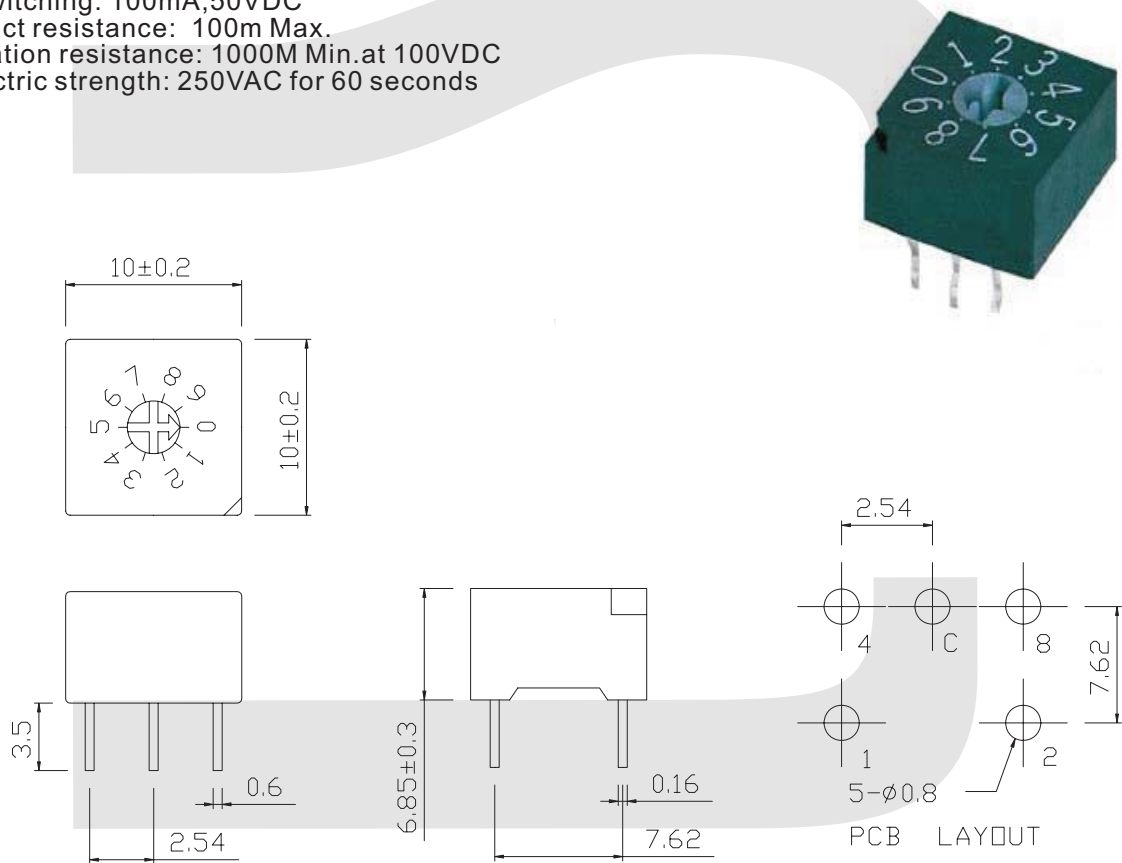
### DIP Switch Series

#### KLS7-RS10 Rotary Dip Switch Series

##### ELECTRICAL

Switching: 25mA,24VDC  
No-switching: 100mA,50VDC  
Contact resistance: 100m Max.  
Insulation resistance: 1000M Min.at 100VDC  
Dielectric strength: 250VAC for 60 seconds

VII



PIN NO.	POSITION									
	0	1	2	3	4	5	6	7	8	9
1		●		●		●		●		●
2			●	●			●	●		
4					●	●	●	●		
8									●	●

### ORDER INFORMATION

**KLS7- RS10**

Part Number

Rs10: ROTARY DIP SWITCH

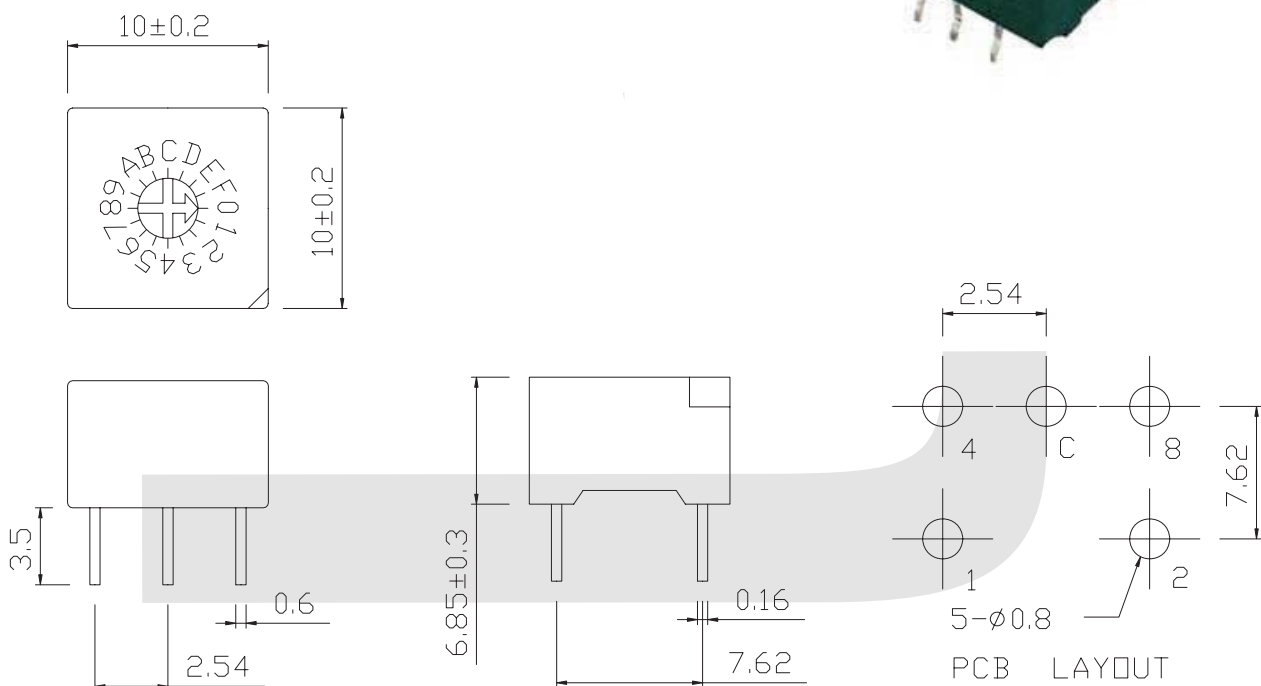
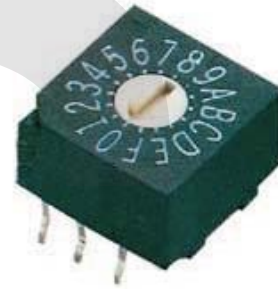
# Switch

## DIP Switch Series

### KLS7-RS16 Rotary Dip Switch Series

#### ELECTRICAL

Switching: 25mA,24VDC  
No-switching: 100mA,50VDC  
Contact resistance: 100m Max.  
Insulation resistance: 1000M Min.at 100VDC  
Dielectric strength: 250VAC for 60 seconds



PIN NO.	POSITION															
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1	○	●	○	●	○	●	○	●	○	●	○	●	○	●	○	●
2	○	○	●	●	○	○	●	●	○	○	●	●	○	○	●	●
4	○	○	○	○	●	●	●	●	○	○	○	○	●	●	●	●
8	○	○	○	○	○	○	○	○	●	●	●	●	●	●	●	●

- - Real Code Rotor  
Color:Yellow (3:3)
- - Complement Code Rotor  
Color:Red (3:3)

## ORDER INFORMATION

**KLS7- RS16**

Part Number

Rs16: ROTARY DIP SWITCH

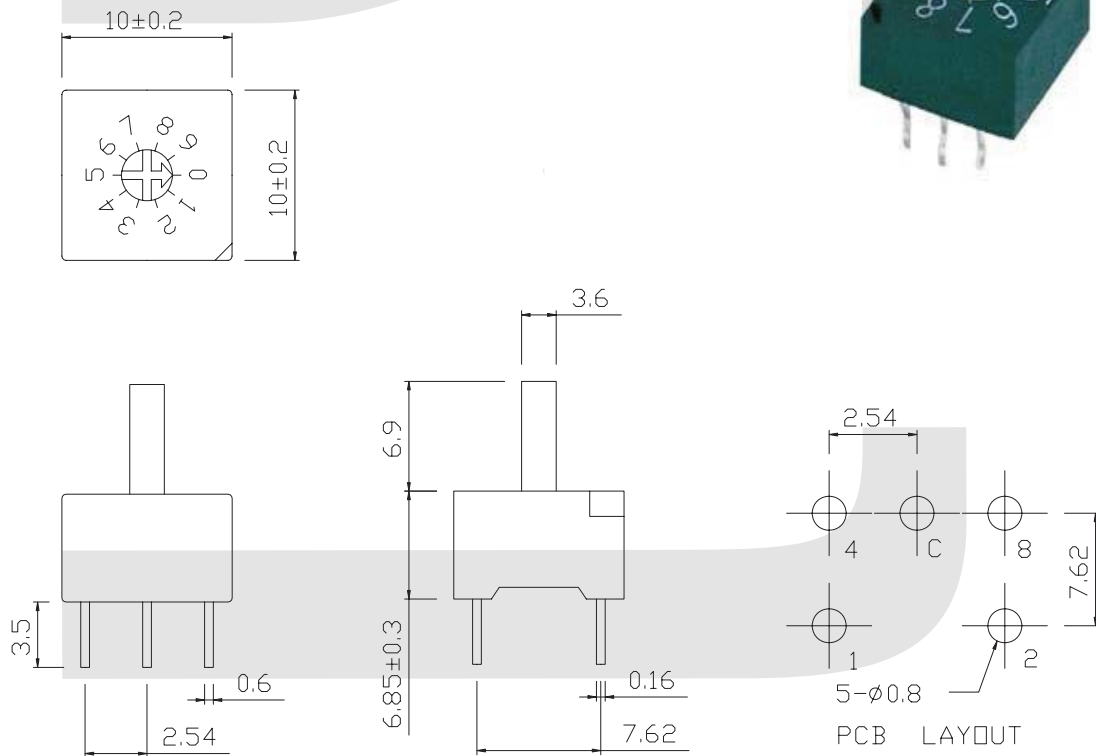
## Switch

### DIP Switch Series

#### KLS7-RSL10 Rotary Dip Switch Series

##### ELECTRICAL

Switching: 25mA,24VDC  
No-switching: 100mA,50VDC  
Contact resistance: 100m Max.  
Insulation resistance: 1000M Min.at 100VDC  
Dielectric strength: 250VAC for 60 seconds



PIN NO.	POSITION									
	0	1	2	3	4	5	6	7	8	9
1		●		●		●		●		●
2			●	●			●	●		
4					●	●	●	●		
8									●	●

### ORDER INFORMATION

KLS7- RSL10

Part Number

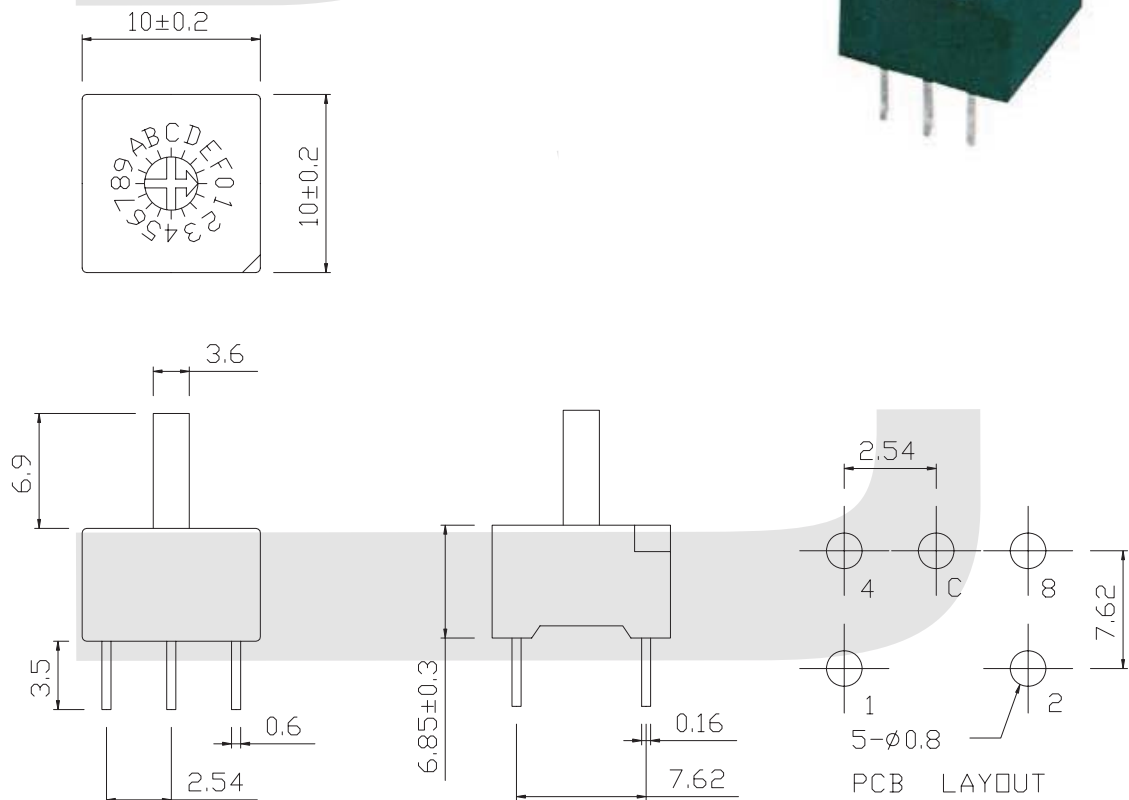
RSL10: ROTARY DIP SWITCH

## DIP Switch Series

### KLS7-RSL16 Rotary Dip Switch Series

#### ELECTRICAL

Switching: 25mA,24VDC  
No-switching: 100mA,50VDC  
Contact resistance: 100m Max.  
Insulation resistance: 1000M Min.at 100VDC  
Dielectric strength: 250VAC for 60 seconds



PIN NO.	POSITION															
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1	○	●	○	●	○	●	○	●	○	●	○	●	○	●	○	●
2	○	○	●	●	○	○	●	●	○	○	●	●	○	○	●	●
4	○	○	○	○	●	●	●	●	○	○	○	○	●	●	●	●
8	○	○	○	○	○	○	○	○	●	●	●	●	●	●	●	●

- - Real Code Rotor  
Color:Yellow (3:3)
- - Complement Code Rotor  
Color:Red (3:3)

## ORDER INFORMATION

**KLS7-RSL 16**

Part Number

RSL16: ROTARY DIP SWITCH

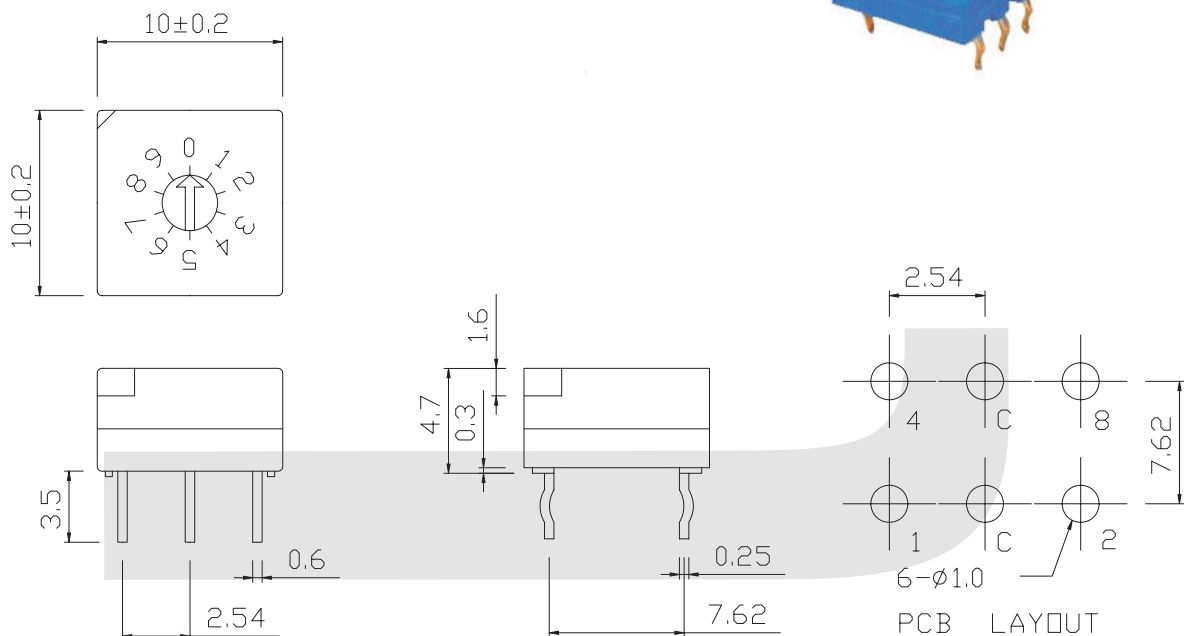
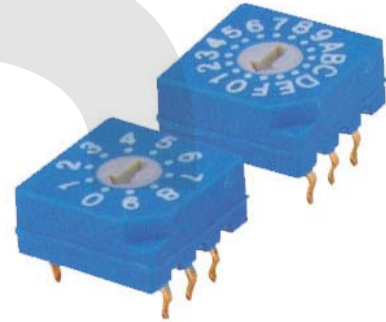
# Switch

## DIP Switch Series

### KLS7-RS31000 Rotary Dip Switch Series

#### ELECTRICAL

Switching: 25mA,24VDC  
No-switching: 100mA,50VDC  
Contact resistance: 100m Max.  
Insulation resistance: 1000M Min.at 100VDC  
Dielectric strength: 250VAC for 60 seconds



PIN NO.	POSITION									
	0	1	2	3	4	5	6	7	8	9
1		●		●		●		●		●
2			●	●			●	●		
4					●	●	●	●		
8									●	●

- - Real Code Rotor  
Color:Yellow (3:3)
- - Complement Code Rotor  
Color:Red (3:3)

## ORDER INFORMATION

Part Number: KLS7-RS 3 10 00

RS: ROTARY DIP SWITCH

Terminations: 2=3x2 3=3x3 4=4x1

Handle: 00 - Flat  
03 - 3.0mm  
07 - 7.0mm  
13 - Ø10x3mm wheel

Codes: 10=BCD 10 Position  
50=BCD Compl 10 Position  
00=Others

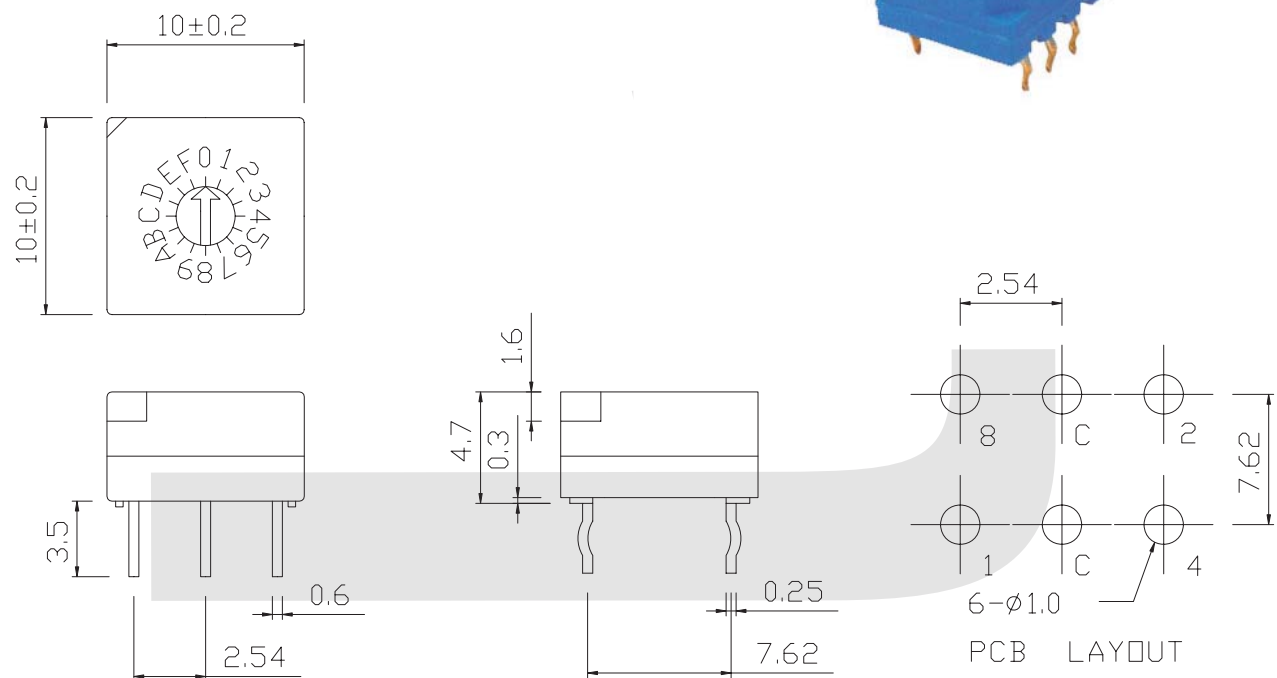
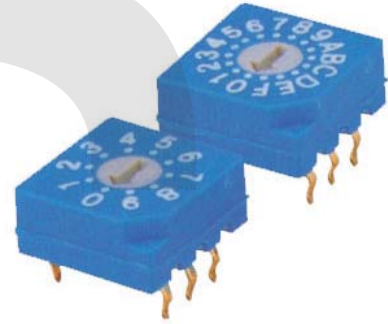
16=BCD 16 Position  
56=BCD Compl 16 Position

## DIP Switch Series

### KLS7-RS31600 Rotary Dip Switch Series

#### ELECTRICAL

Switching: 25mA,24VDC  
No-switching: 100mA,50VDC  
Contact resistance: 100m Max.  
Insulation resistance: 1000M Min.at 100VDC  
Dielectric strength: 250VAC for 60 seconds



PIN NO.	POSITION															
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1	○	●	○	●	○	●	○	●	○	●	○	●	○	●	○	●
2	○	○	●	●	○	○	●	●	○	○	●	●	○	○	●	●
4	○	○	○	○	●	●	●	●	○	○	○	○	●	●	●	●
8	○	○	○	○	○	○	○	○	●	●	●	●	●	●	●	●

- - Real Code Rotor  
Color:Yellow (3:3)
- - Complement Code Rotor  
Color:Red (3:3)

## ORDER INFORMATION

**KLS7-RS 3 16 00**

Part Number: KLS7-RS 3 16 00

RS: ROTARY DIP SWITCH

Terminations: 2=3x2 3=3x3 4=4x1

Handle: 00 - Flat  
03 - 3.0mm  
07 - 7.0mm  
13 - ø10x3mm wheel

Codes: 10=BCD 10 Position  
50=BCD Compl 10 Position  
00=Others

16=BCD 16 Position  
56=BCD Compl 16 Position

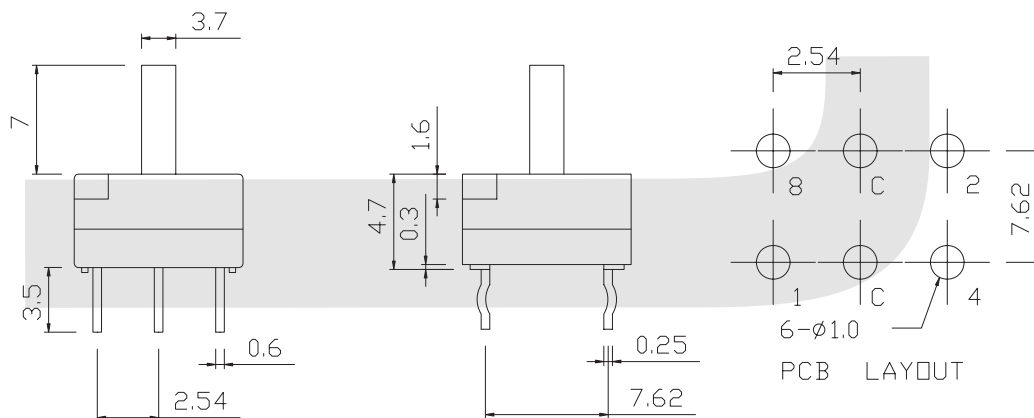
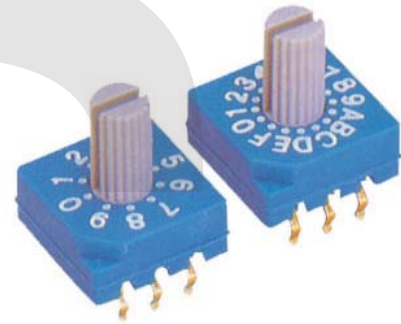
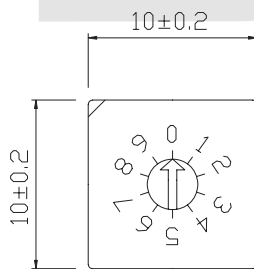
# Switch

## DIP Switch Series

### KLS7-RS35007 Rotary Dip Switch Series

#### ELECTRICAL

Switching: 25mA,24VDC  
No-switching: 100mA,50VDC  
Contact resistance: 100m Max.  
Insulation resistance: 1000M Min.at 100VDC  
Dielectric strength: 250VAC for 60 seconds



PIN NO.	POSITION									
	0	1	2	3	4	5	6	7	8	9
1		●		●		●		●		●
2			●	●			●	●		
4					●	●	●	●		
8									●	●

- - Real Code Rotor  
Color: Yellow (3:3)
- - Complement Code Rotor  
Color: Red (3:3)

## ORDER INFORMATION

**KLS7-RS 3 50 07**

Part Number: KLS7-RS  
RS: ROTARY DIP SWITCH  
Terminations: 2=3x2 3=3x3 4=4x1

Handle: 00 - Flat  
03 - 3.0mm  
07 - 7.0mm  
13 - Ø10x3mm wheel

Codes: 10=BCD 10 Position  
50=BCD Compl 10 Position  
00=Others

16=BCD 16 Position  
56=BCD Compl 16 Position



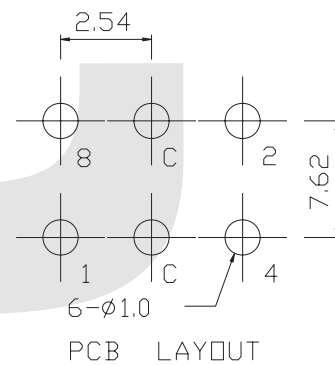
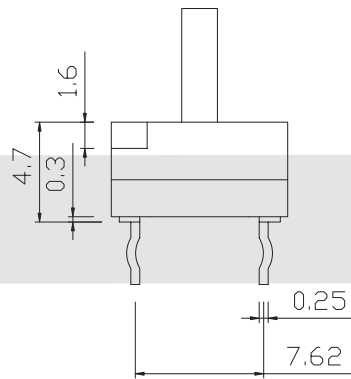
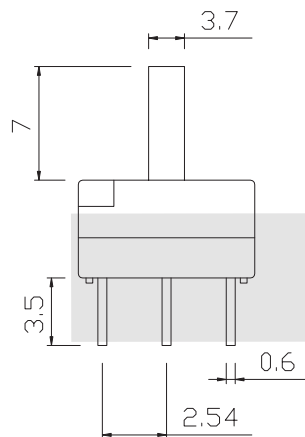
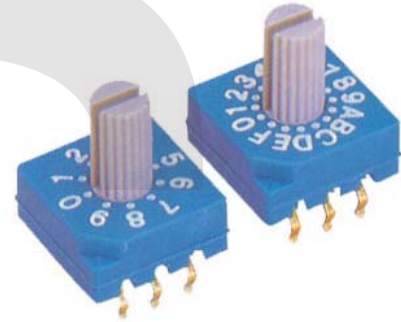
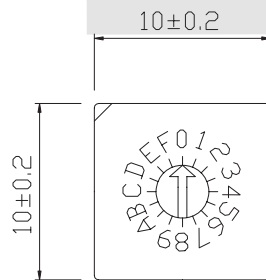
# Switch

## DIP Switch Series

### KLS7-RS35607 Rotary Dip Switch Series

#### ELECTRICAL

Switching: 25mA,24VDC  
No-switching: 100mA,50VDC  
Contact resistance: 100m Max.  
Insulation resistance: 1000M Min.at 100VDC  
Dielectric strength: 250VAC for 60 seconds



PIN NO.	POSITION															
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1	○	●	○	●	○	●	○	●	○	●	○	●	○	●	○	●
2	○	○	●	●	○	○	●	●	○	○	●	●	○	○	●	●
4	○	○	○	○	●	●	●	●	○	○	○	○	●	●	●	●
8	○	○	○	○	○	○	○	○	●	●	●	●	●	●	●	●

- - Real Code Rotor  
Color:Yellow (3:3)
- - Complement Code Rotor  
Color:Red (3:3)

## ORDER INFORMATION

**KLS7-RS 3 56 07**

Part Number: KLS7-RS 3 56 07

RS: ROTARY DIP SWITCH

Terminations: 2=3x2 3=3x3 4=4x1

Handle: 00 - Flat  
03 - 3.0mm  
07 - 7.0mm  
13 - Ø10x3mm wheel

Codes: 10=BCD 10 Position  
50=BCD Compl 10 Position  
00=Others

16=BCD 16 Position  
56=BCD Compl 16 Position