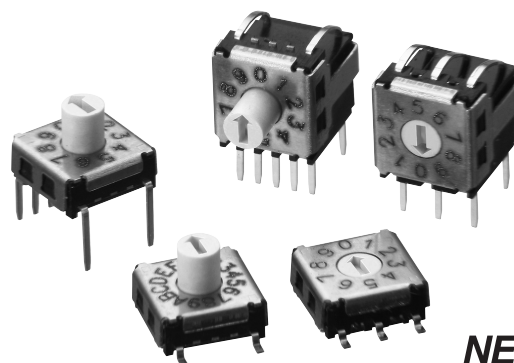


Miniature Rotary DIP Switch A6K/A6KS

Miniature (7.2 × 7.2mm size) Rotary DIP Switch

- Mounting space reduced by 50%.
(compared with conventional models)
- SMT and through hole type Available.
Side-actuated type available.
- Gold-plated contacts ensure high reliability.
- RoHS Compliant

**NEW**

Ordering Information

■ Through hole type

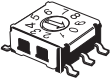
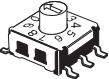
3 × 3 Terminal, tube packaging			Top-actuated flat	Top-actuated extended shaft	Side-actuated flat	Side-actuated extended shaft
Output code	No. of positions	Quantity per tube				
BCD 1-2-4-8	10	Top: 63	A6K-102RF	A6K-102RS	A6KV-102RF	A6KV-102RS
BCD Hexadecimal 1-2-4-8	16	Side: 60	A6K-162RF	A6K-162RS	A6KV-162RF	A6KV-162RS

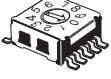
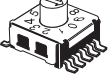
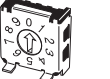
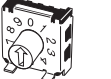
5 × 2 Terminal, tube packaging			Top-actuated flat	Top-actuated extended shaft	Side-actuated flat	Side-actuated extended shaft
Output code	No. of positions	Quantity per tube				
BCD 1-2-4-8	10	Top: 63	A6K-104RF	A6K-104RS	A6KV-104RF	A6KV-104RS
BCD Hexadecimal 1-2-4-8	16	Side: 60	A6K-164RF	A6K-164RS	A6KV-164RF	A6KV-164RS

■ SMT type

3 × 3 Terminal, tube packaging			Top-actuated flat	Top-actuated extended shaft
Output code	No. of positions	Quantity per tube		
BCD 1-2-4-8	10	63	A6KS-102RF	A6KS-102RS
BCD Hexadecimal 1-2-4-8	16		A6KS-162RF	A6KS-162RS

5 × 2 Terminal, tube packaging			Top-actuated flat	Top-actuated extended shaft	Side-actuated flat	Side-actuated extended shaft
Output code	No. of positions	Quantity per tube				
BCD 1-2-4-8	10	63	A6KS-104RF	A6KS-104RS	A6KSV-104RF	A6KSV-104RS
BCD Hexadecimal 1-2-4-8	16		A6KS-164RF	A6KS-164RS	A6KSV-164RF	A6KSV-164RS

3 × 3 Terminal Embossed taping Packages		Top-actuated flat		Top-actuated extended shaft	
Output code	No. of positions	Quantity per reel		Quantity per reel	
BCD 1-2-4-8	10	1450	A6KS-102RF-P	850	A6KS-102RS-P
BCD Hexadecimal 1-2-4-8	16		A6KS-162RF-P		A6KS-162RS-P

5 × 2 Terminal Embossed taping Packages		Top-actuated flat		Top-actuated extended shaft		Side-actuated flat		Side-actuated extended shaft	
Output code	No. of positions	Quantity per reel		Quantity per reel		Quantity per reel		Quantity per reel	
BCD 1-2-4-8	10	1450	A6KS-104RF-P	850	A6KS-104RS-P	750	A6KSV-104RF-P	750	A6KSV-104RS-P
BCD Hexadecimal 1-2-4-8	16		A6KS-164RF-P		A6KS-164RS-P		A6KSV-164RF-P		A6KSV-164RS-P

Specifications

■ Characteristics

Switching capacity		25 mA at 24 VDC
Minimum permissible load		10 μ A at 3.5 VDC
Contact resistance		200 m Ω max.
Insulation resistance		100 M Ω min. (at 250 VDC)
Dielectric strength		250 VAC for 1 min between terminals
Operating torque		200 g-cm max. (1.96 $\times$ 10 ⁻² N-m max.)
Vibration resistance	Malfunction durability	10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Malfunction durability	300 m/s ² min.
Ambient operating temperature		-30 to 80°C at 60% max. (with no icing or condensation)
Ambient operating humidity		35% to 95% (at 5 to 35°C)
Electrical service life		20,000 steps min.
Weight (See note 2.)	Through hole terminal	Top-actuated, flat: Approx. 0.4 g, Side-actuated, flat: Approx. 0.7 g
	SMT terminal	Top-actuated, flat: Approx. 0.4 g, Side-actuated, flat: Approx. 0.4 g

Note: 1. Data shown are of initial value.
2. Add 0.03 g for the extended-shaft version of each model.

■ Output Codes

10-position Models

Type	BCD 1-2-4-8			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●

16-position Models

Type	BCD/hexadecimal 1-2-4-8			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
B	●	●		●
C			●	●
D	●		●	●
E		●	●	●
F	●	●	●	●

Note: "●" indicates that the internal switch is ON.

Dimensions

Note: 1. All units are in millimeters unless otherwise indicated.

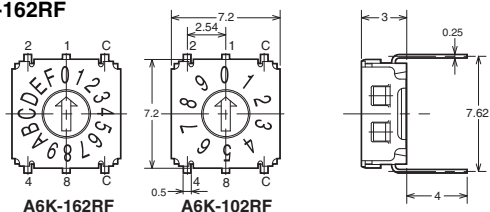
2. Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

Through hole type

Top-actuated Flat Models with 3x3 Terminal Arrangement

A6K-102RF

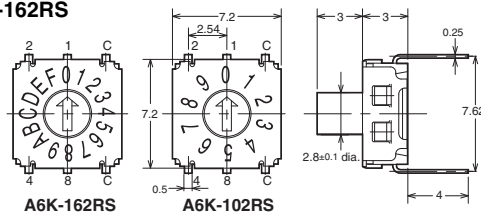
A6K-162RF



Top-actuated Extended shaft Models with 3x3 Terminal Arrangement

A6K-102RS

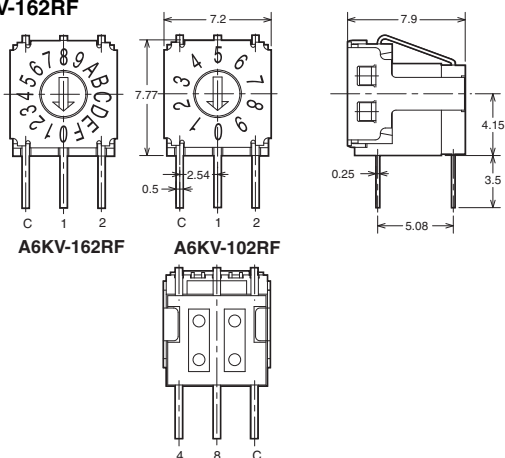
A6K-162RS



Side-actuated Flat Models with 3x3 Terminal Arrangement

A6KV-102RF

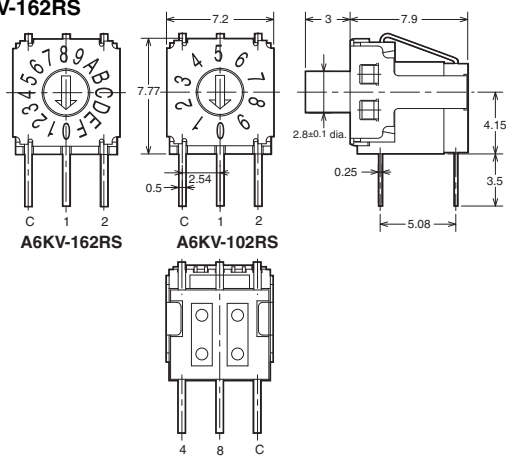
A6KV-162RF



Side-actuated Extended-shaft Models with 3x3 Terminal Arrangement

A6KV-102RS

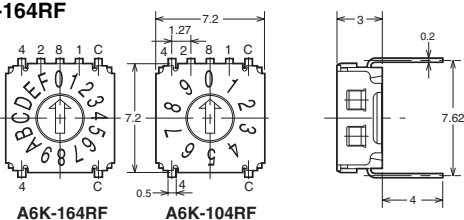
A6KV-162RS



Top-actuated Flat Models with 5x2 Terminal Arrangement

A6K-104RF

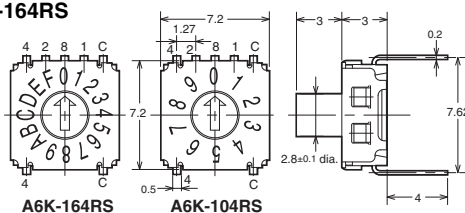
A6K-164RF



Top-actuated Extended shaft Models with 5x2 Terminal Arrangement

A6K-104RS

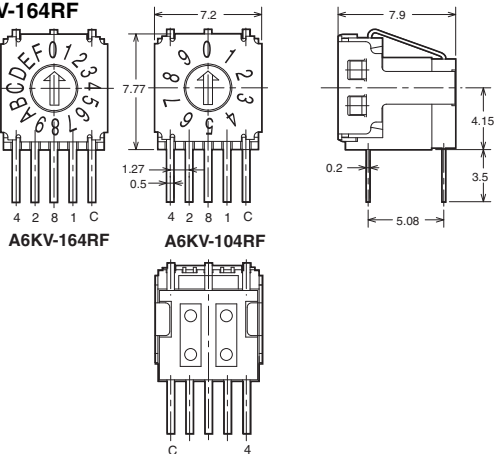
A6K-164RS



Side-actuated Flat Models with 5x2 Terminal Arrangement

A6KV-104RF

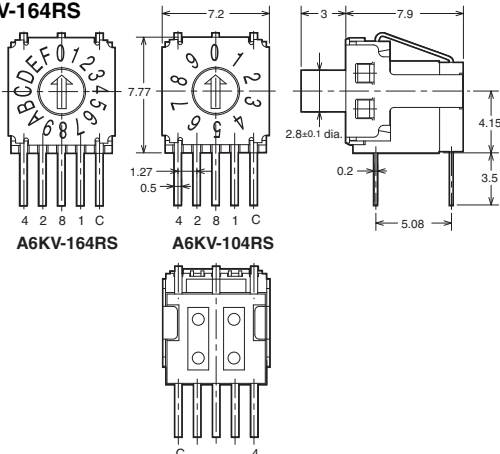
A6KV-164RF



Side-actuated Extended-shaft Models with 5x2 Terminal Arrangement

A6KV-104RS

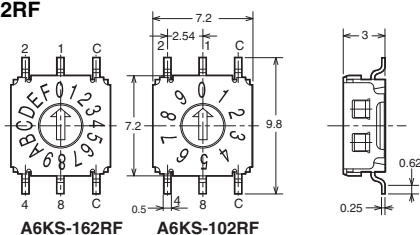
A6KV-164RS



■ SMT type

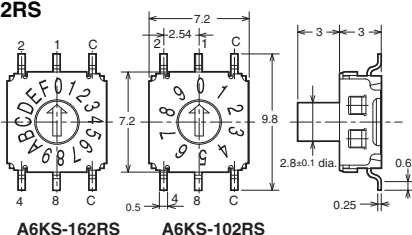
Top-actuated Flat Models with 3x3 Terminal Arrangement

A6KS-102RF
A6KS-162RF



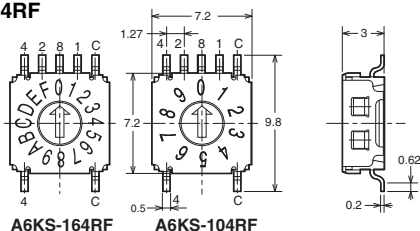
Top-actuated Extended shaft Models with 3x3 Terminal Arrangement

A6KS-102RS
A6KS-162RS



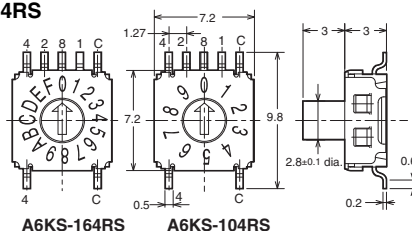
Top-actuated Flat Models With 5x2 Terminal Arrangement

A6KS-104RF
A6KS-164RF



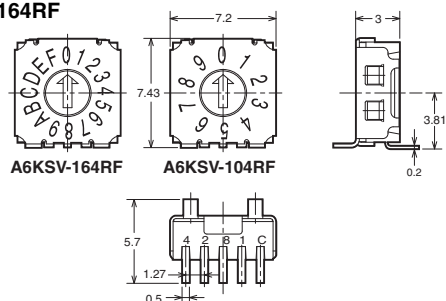
Top-actuated Extended shaft Models with 5x2 Terminal Arrangement

A6KS-104RS
A6KS-164RS



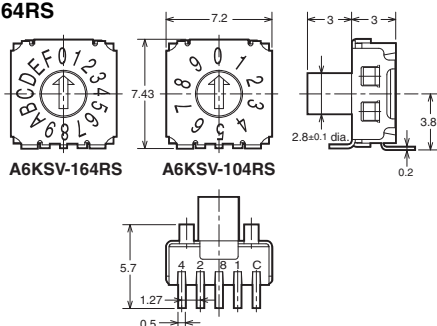
Side-actuated Flat Models with 5x2 Terminal Arrangement

A6KSV-104RF
A6KSV-164RF



Side-actuated Extended-shaft Models with 5x2 Terminal Arrangement

A6KSV-104RS
A6KSV-164RS



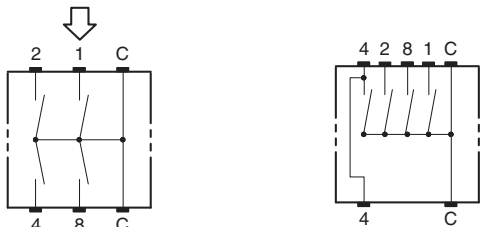
■ Internal Connections

Top-actuated

3x3 Terminal Arrangement 5x2 Terminal Arrangement

Through hole type and SMT type Through hole type and SMT type

Actuator surface



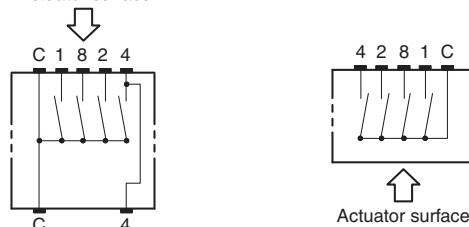
Note: 3x3 internal diagram applies to both top and side actuated models

Side-actuated

5x2 Terminal Arrangement 5x2 Terminal Arrangement

Through hole type SMT type

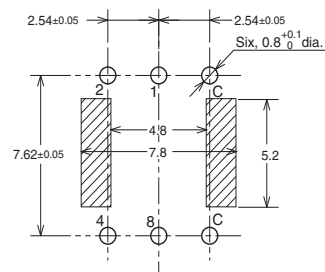
Actuator surface



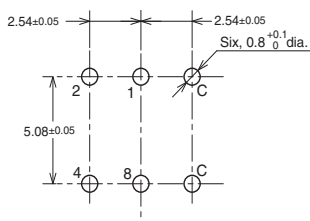
■ PCB Cutout Dimensions (Top View)

3×3 Terminal Arrangement

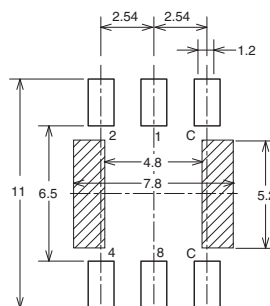
Through hole
(Top-actuated Models)



Through hole
(Side-actuated Models)

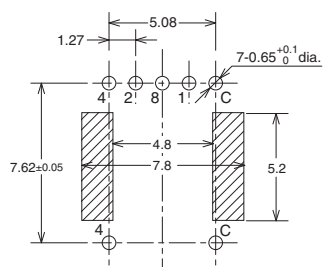


SMT
(Top-actuated Models)

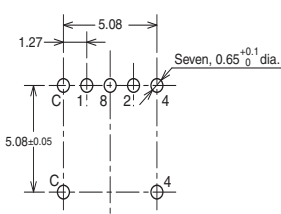


5×2 Terminal Arrangement

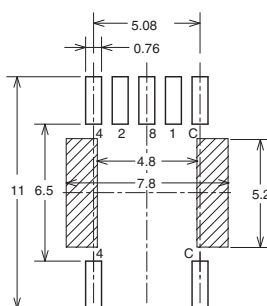
Through hole
(Top-actuated Models)



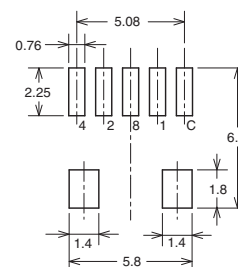
Through hole
(Side-actuated Models)



SMT
(Top-actuated Models)



SMT
(Side-actuated Models)



 Through hole: Pattern prohibited area

All sales are subject to Omron Electronic Components LLC standard terms and conditions of sale, which can be found at http://www.components.omron.com/components/web/webfiles.nsf/sales_terms.html

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

OMRON[®]

**OMRON ELECTRONIC
COMPONENTS LLC**

55 E. Commerce Drive, Suite B
Schaumburg, IL 60173

847-882-2288

OMRON ON-LINE

Global - <http://www.omron.com>

USA - <http://www.components.omron.com>

Cat. No. X303-E-1

11/10

Specifications subject to change without notice

Printed in USA