## OMRON

# DIP Switch

## **Highly Reliable Subminiature DIP Switch**

- Precision rotary cam and contactor drive provide high reliability
- Subminiature: 9 (W) x 6.6 (L) x 4.5 (H) mm
- Molded base and rotor sealed by O-ring; eliminates the need for tape sealing
- RoHS Compliant



# **Ordering Information**

		Part number	
Output code type	No. of switching positions	Top actuated	Side actuated
BCD	10	A6C-10R(N)	A6CV-10R
BCD Hexadecimal	16	A6C-16R(N)	A6CV-16R

Important Note: Switches cannot be water-washed.

# **Specifications**

## ■ Characteristics

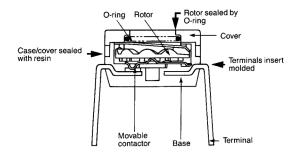
Switching capacity		100 mA, 30 VDC	
Permissible load		10 μA, 3.5 VDC min.	
Carry current		100 mA max.	
Contact resistance		200 MΩ max.	
Insulation resistance		100 MΩ min. (at 250 VDC)	
Dielectric strength		500 VAC for 1 minute between current-carrying metal part and ground 250 VAC for 1 minute between terminals of same pole	
Operating force		15 to 100 g-cm	
Vibration	Malfunction durability	10 to 55 Hz, 1.5 mm double amplitude	
Shock	Malfunction durability	Approx. 300 m/s <sup>2</sup> (30 G)	
Materials	Base/Cover	PPS (Polyphenylene sulfide)	
	Rotor	PBT (Polybutylene terephthalate)	
	O-ring	Acryl nitril butadiene rubber	
	Movable contact	SUS plate, gold-plated	
	Terminal	42-alloy plate (nickel-iron alloy)	
Ambient temperature	Operating	-20° to 70°C	
Humidity		35% to 95% RH	
Service life	Mechanical	10,000 operations min.	
	Electrical	2,000 operations min.	
Weight		A6C-10R, -16R: Approx. 0.4 g, A6CV-10R, -16R: Approx. 0.7 g	

**Note:** Data shown are of initial value.

## ■ Construction

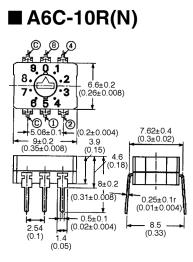
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The movable contactor is moved as the rotor rotates. The terminals are insert molded into the base. The rotor is secured by an O-ring and the case and the cover are made of plastic resin. Therefore, the internal mechanism is effectively sealed.

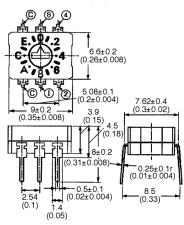


# Dimensions

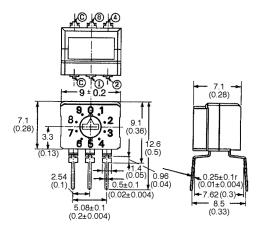
Unit: mm (inch)



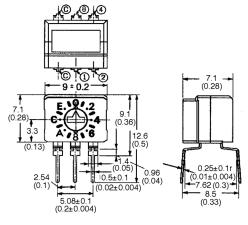
■ A6C-16R(N)



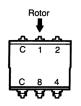
■ A6CV-10R



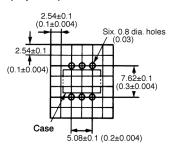




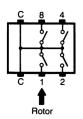
Terminal arrangement (bottom view)



Mounting holes PCB dimension (Top view)



Internal connections (top view)



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