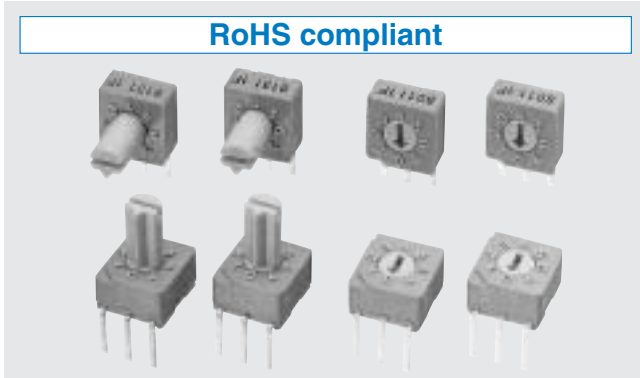


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ROTARY CODED SWITCHES

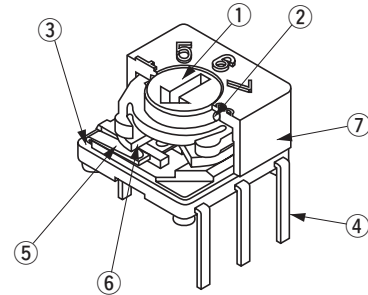
RoHS compliant



FEATURES

- Lead-free soldering
- 3 bits 8 positions type
- Protection against dust and washable after soldering
- DIP-pin configuration: 2.54 mm pitch

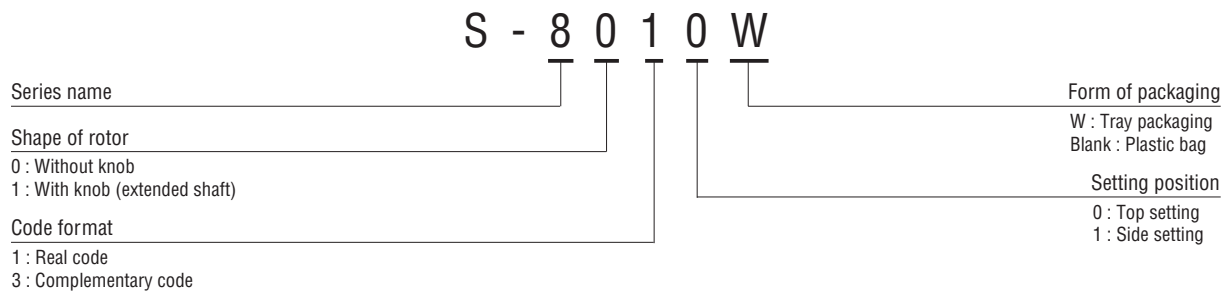
INTERNAL STRUCTURE



Part name	Material	Flammability
① Rotor	Polyoxymethylene	UL-94HB
② "O" ring	Silicone rubber	
③ Base	Polybutyleneterephthalate	—
④ Terminal pin	Copper alloy, Gold-plated	
⑤ Contact		
⑥ P.C.B.	Gold-plated epoxy board	UL-94HB
⑦ Housing	Polybutyleneterephthalate	

CFCs, Halon, Carbon tetrachloride and designated bromic flame retardant PBBOs and PBBs are not used in our products.

PART NUMBER DESIGNATION



LIST OF PART NUMBERS

Shape	Form of packaging	Binary coded octal		Pieces in package	
		Real code	Complementary code		
Top setting	Tray packaging	S-8010W	S-8030W	50 pcs./tray	
		Plastic bag	S-8010	S-8030	50 pcs./pack
	With knob	Tray packaging	S-8110W	S-8130W	50 pcs./tray
		Plastic bag	S-8110	S-8130	50 pcs./pack
Side setting	Without knob	Tray packaging	S-8011W	S-8031W	50 pcs./tray
		Plastic bag	S-8011	S-8031	50 pcs./pack
	With knob	Tray packaging	S-8111W	S-8131W	50 pcs./tray
		Plastic bag	S-8111	S-8131	50 pcs./pack

* Verify the above part numbers when placing orders.
Tray version can be supplied only in tray units.

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ROTARY CODED SWITCHES

STANDARD SPECIFICATIONS

Circuit type	BCO (Real code, complementary code)
Operating temperature range	-25 ~ 70 °C
Storage temperature range	
Sealing	Washable by "O" ring
Net weight	Approx. 0.27 g (S-8010, S-8030) Approx. 0.34 g (S-8110, S-8130) Approx. 0.33 g (S-8011, S-8031) Approx. 0.40 g (S-8111, S-8131)

ELECTRICAL CHARACTERISTICS

Contact rating Non-switching Switching Minimum	DC50 V 100 mA DC5 V 100 mA DC20 mV 1 μA
Contact resistance	100 mΩ maximum
Insulation resistance	1000 MΩ (DC100 V) minimum
Dielectric strength	AC250 V, 60 s

MECHANICAL CHARACTERISTICS

No. of positions	8
Adjustment torque	36 mN·m {367 gf·cm} maximum
Stepping angle	45°
Terminal strength	10 N {1.02 kgf} minimum
Solderability	245 ± 3 °C, 2 ~ 3 s
Soldering heat	Flow : 260 ± 3 °C as the temperature in a pot of molten solder, immersion from head of terminal to backside of board, 5 ~ 6 s, two times maximum
	Manual soldering : 380 ± 10 °C, 3 ~ 4 s

{ } : Reference only

ENVIRONMENTAL CHARACTERISTICS

Vibration	Amplitude 1.5 mm or Acceleration 98 m/s ² , 10-500-10 Hz, 3 directions for 2 h each
Shock	490 m/s ² , 11 ms 6 directions for 3 times each
Load life	10000 steps minimum DC5 V, 100 mA
Humidity (Steady state)	40 °C, Relative humidity 90 ~ 95 %, 240 h
High temperature exposure	70 °C, 96 h
Low temperature exposure	-25 °C, 96 h
Thermal shock	-25 (0.5 h) ~ 70 °C (0.5 h), 5 cycles

CODE FORMAT

No. of positions		0	1	2	3	4	5	6	7	
Code	Real code	4				●	●	●	●	
		2		●	●			●	●	
		1		●		●		●		●
	Complementary code	4	●	●	●	●				
		2	●	●			●	●		
		1	●		●		●		●	

● ... Contact closed

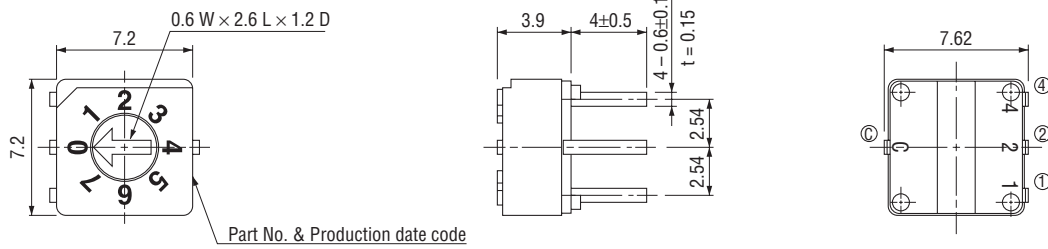
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ROTARY CODED SWITCHES

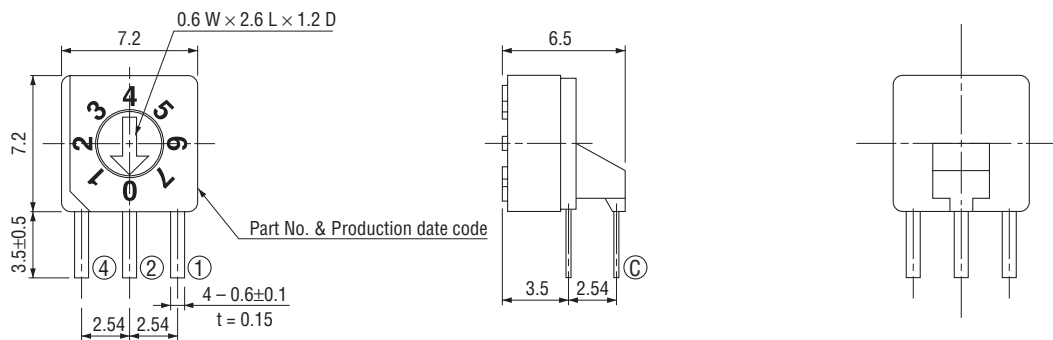
OUTLINE DIMENSIONS

Unless otherwise specified, tolerance: ± 0.3 (Unit: mm)

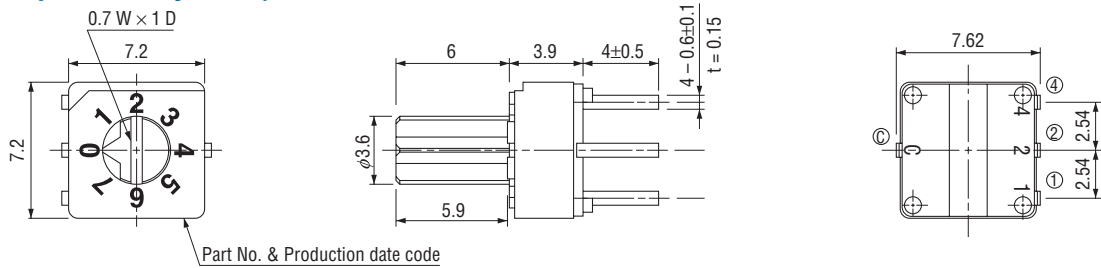
- S-8010 (Real code)
- S-8030 (Complementary code)



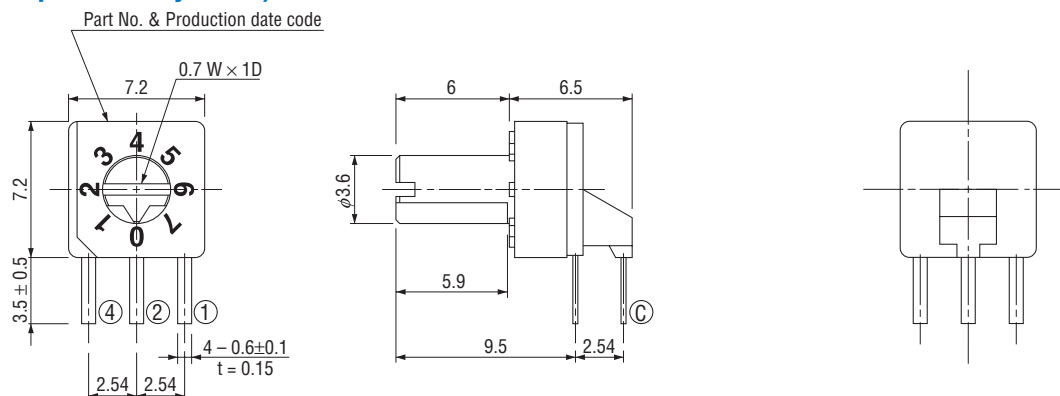
- S-8011 (Real code)
- S-8031 (Complementary code)



- S-8110 (Real code)
- S-8130 (Complementary code)



- S-8111 (Real code)
- S-8131 (Complementary code)



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ROTARY CODED SWITCHES

■ TERMINAL CONNECTION / P.C.B. THROUGH HOLE DIMENSIONS

(Unit: mm)

	Top setting	Side setting
Terminal pin layout (Bottom view)	<p>Real code Complementary code</p>	<p>Operating face of real code Operating face of complementary code</p>
P.C.B. dimensions (Bottom view)	<p>2.54±0.1 7.62±0.1 4 - ϕ 0.8 hole S-8000 case</p>	<p>2.54±0.1 7.62±0.1 4 - ϕ 0.8 hole S-8000 case</p>

■ PACKAGING SPECIFICATIONS

<Tray packaging specifications>

- Tray version is packaged in 50 pcs. per tray. Orders will be accepted for units of 50 pcs., i. e., 50, 100, 150 pcs. etc.
- Tray version is boxed with 10 trays.

<Bulk pack specifications>

- The smallest unit of bulk pack in a plastic bag is 10 pcs. per pack.
Orders will be accepted for unit of minimum 10 pcs., i.e., 10, 20, 30 pcs., etc.
- Boxing of bulk in a plastic bag is performed with 50 pcs. (standard 100 pcs.) per box.