



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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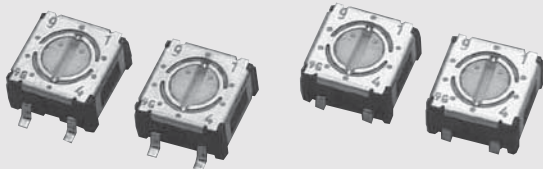
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



ROTARY CODED SWITCHES (SMD)

S-4000

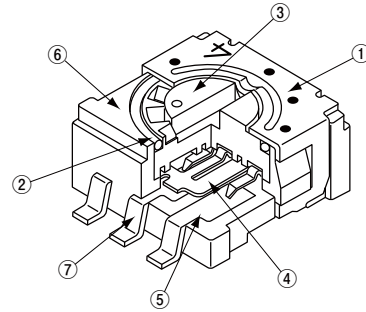
RoHS compliant



FEATURES

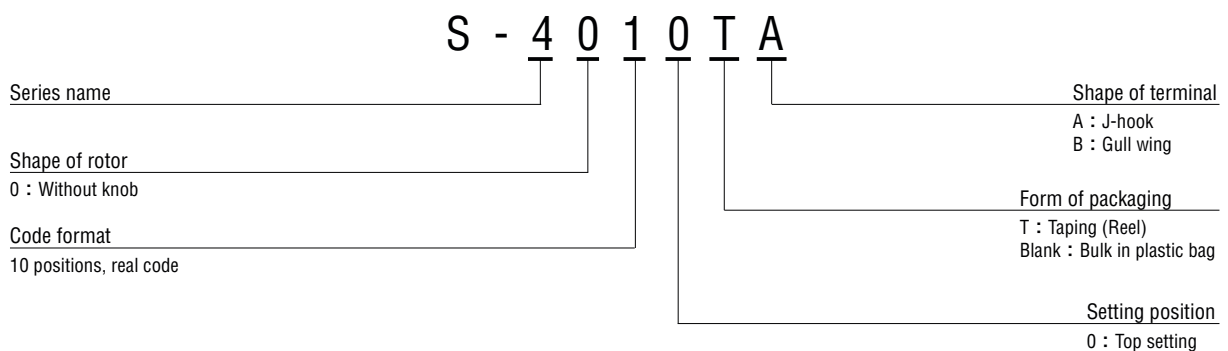
- RoHS compliant
- Small size of □4.8 mm makes it perfect for high density board mounting applications
- Compatible with most automatic pick & place machinery
- Gold plated contact provides excellent reliability
- Low profile design of 2.6 mm

INTERNAL STRUCTURE



Part name	Material	Flammability
① Cover	Stainless steel (SUS 304)	—
② “O” ring	Silicone rubber	UL94HB
③ Rotor	Polyphenylenesulphide	UL94V-0
④ Moving contact	Copper alloy, Gold-plated	—
⑤ Fixed contact		
⑥ Housing	Polyphenylenesulphide	UL94V-0
⑦ Terminal pin	Copper alloy, Gold-plated	—

PART NUMBER DESIGNATION



LIST OF PART NUMBERS

Setting position	Shape of terminal	Form of packaging	BCD real code	Piece in package
Top setting	A (J-hook)	Plastic bag	S-4010A	50 pcs./pack
		Taping	S-4010TA	500 pcs./reel
	B (Gull wing)	Plastic bag	S-4010B	50 pcs./pack
		Taping	S-4010TB	500 pcs./reel

* Verify the above part numbers when placing orders.
Taping version can be supplied only in reel unit.

S-4000

ROTARY CODED SWITCHES (SMD)

STANDARD SPECIFICATIONS

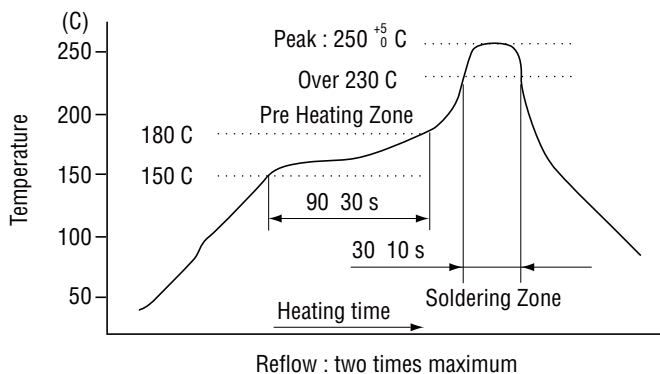
Circuit type	BCD (Real code)
Operating temperature range	-25 ~ 70 °C
Storage temperature range	
Sealing	Non washable
Net weight	Approx. 0.12 g

MECHANICAL CHARACTERISTICS

No. of positions	10
Adjustment torque	10 mN·m {102 gf·cm} maximum
Stepping angle	36° (10 positions)
Solderability	245 ± 3 °C, 2 ~ 3 s
Soldering heat	Reflow : 255 °C (Peak temperature) Please refer to the profile below)
	Manual soldering : 350 ± 10 °C, 3 ~ 4 s
Shear (adhesion)	5 N {0.51 kgf} 10 s
Substrate bending	Width 90 mm, bend 3 mm, 5 s, 1 time
Pull-off strength	5 N {0.51 kgf} 10 s

{ } : Reference only

<Reflow profile for soldering heat evaluation>



ELECTRICAL CHARACTERISTICS

Contact rating Non-switching Switching	DC50 V 100 mA DC2.4 V 100 mA
Contact resistance	100 mΩ maximum
Insulation resistance	100 MΩ (DC100 V) minimum
Dielectric strength	AC250 V, 60 s

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 DC2.4 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		10 positions									
Positions		0	1	2	3	4	5	6	7	8	9
Code	8									●	●
	4					●	●	●	●		
	2			●	●			●	●		
	1	●		●		●		●		●	●

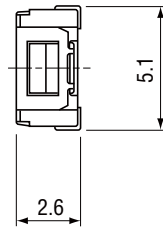
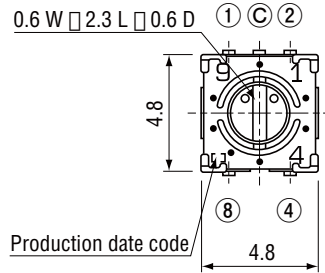
●...Contact closed

S-4000

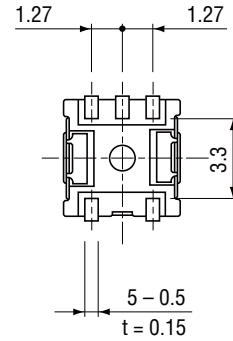
ROTARY CODED SWITCHES (SMD)

OUTLINE DIMENSIONS

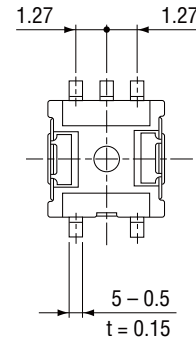
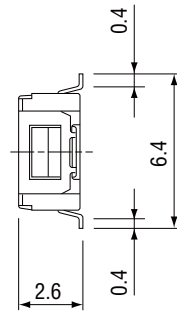
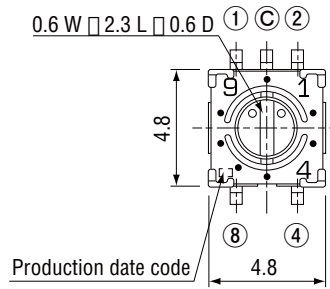
S-4010A



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

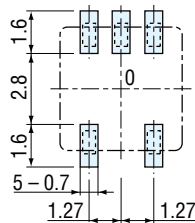


S-4010B

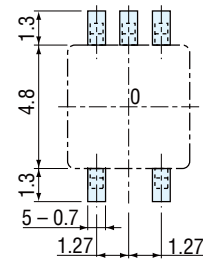


RECOMMENDED P.C.B. PAD OUTLINE DIMENSIONS

A type



B type



(Unit : mm)

Note) The zero point is the center of mounting.

S-4000

ROTARY CODED SWITCHES (SMD)

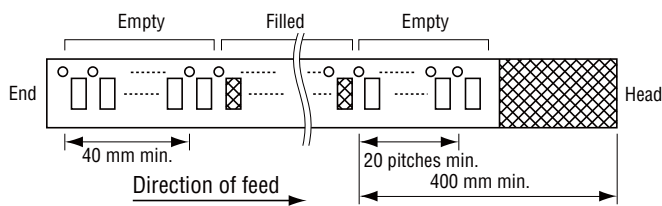
PACKAGING SPECIFICATIONS

<Taping packaging specifications>

- Taping version is packaged in 500 pcs. per reel.
Orders will be accepted for units of 500 pcs., i.e., 500, 1000, 1500, pcs., etc.
- Taping version is boxed with one reel (500 pcs.).

Maximum number of consecutive missing pieces=2.
Leader length and reel dimension are shown in the diagrams below:

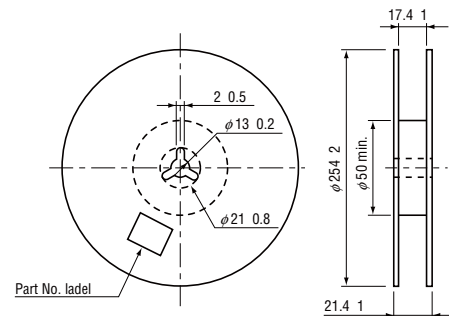
● Embossed tape dimensions



● Reel dimensions

(Unit: mm)

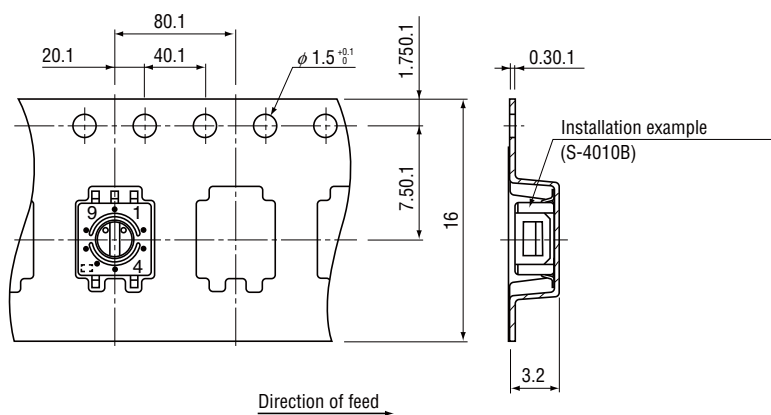
(Conforms to JIS C 0806-3)
(In accordance with EIAJ ET-7200A)



● S-4010TA/TB

(Conforms to JIS C 0806-3)

(Unit: mm)



<Bulk pack specifications>

- The smallest unit of bulk pack in 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 200 pcs.) per box.