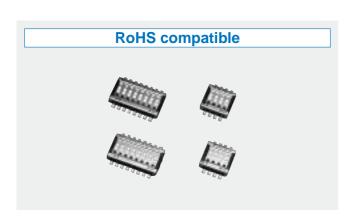
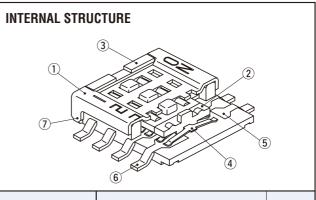
COPAL ELECTRONICS

SLIDE SWITCHES (1 mm PITCH)



FEATURES

- Lead-free soldering
- Lowest profile design of 1.45 mm
- Fine pitch of 1 mm
- Easy motion with knob height of 0.2 mm



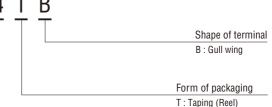
CVS

Part name		Material	Flammability
1	Cover	Stainless steel, Gold-plated	_
2	Slider	PA (Polyamide)	UL-94V-0
3	Housing	PPS (Polyphenylenesulphide)	01-940-0
4	Slider contact	Stainless steel, Gold-plated	
5	Fixed contact	Copper alloy, Gold-plated	_
6	Terminal pin		
7	Earth terminal	Stainless steel, Gold-plated	

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

PART NUMBER DESIGNATION

	$\underline{C V S} - \underline{O 4} \underline{I} \underline{B}$
Series name	
No. of bits	
04 : 4 bits 08 : 8 bits	



T : Taping (Reel) Blank : Bulk in vinyl bags

LIST OF PART NUMBERS

No. of bits	Form of Shape of packaging terminals	B (Gull wing)	Pieces in package
4	Taping	CVS-04TB	2000 pcs./reel
	Vinyl pack	CVS-04B	100 pcs./pack
8	Taping	CVS-08TB	2000 pcs./reel
0	Vinyl pack	CVS-08B	100 pcs./pack



STANDARD SPECIFICATIONS

Operating temp. range	– 40 ~ 85 °C
Storage temp. range	
Sealing	Non-washable
Net weight	Approx. 0.067g (CVS-04B) Approx. 0.13 g (CVS-08B)

ELECTRICAL CHARACTERISTICS

Contact rating Non-switching Switching Minimum	DC50 V 100 mA DC6 V, 100 mA DC24 V, 25 mA DC20 mV 1 μA
Contact resistance	200 m Ω maximum
Insulation resistance	100 M Ω (DC100 V) minimum
Dielectric strength	AC250 V, 60 s

MECHANICAL CHARACTERISTICS

Operating force	3 N {0.306 kgf} maximum
Stop strength	6 N {0.61 kgf}, 60 s
Solderability	245 ± 3 °C, 2 ~ 3 s
Soldering heat	Reflow : 255 °C (Peak temperature) Please refer to the profile below
Soluering near	Manual soldering : 350 \pm 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

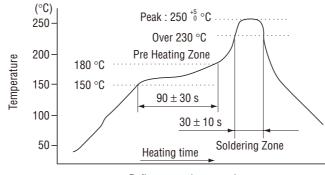
{ }: Reference only

ENVIRONMENTAL CHARACTERISTICS

Vibration	Amplitude 1.5 mm (P-P) or Acceleration 98 m/s ² , 10-500 Hz, 3 directions for 10 cycles each
Shock	490 m/s ² , 11 ms 6 directions for 3 times each
Load life	Continuous load 1000 cycles, DC6 \pm 0.5 V, 100 \pm 10 mA
Humidity	-10 ~ 65 °C, Relative humidty 0 ~ 96 %, 24 h for 10 cycles
High temp. exposure	85 °C, 96 h
Low temp. exposure	−40 °C, 96 h
Thermal shock	-40 (0.5 h) ~ 85 °C (0.5 h), 5 cycles

Oct, 2004

Reflow profile for soldering heat evaluation

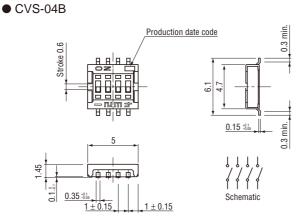


Reflow : two times maximum

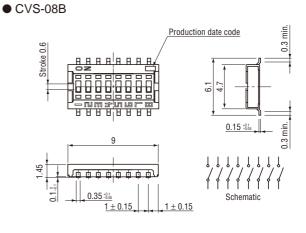
COPAL ELECTRONICS

CVS SLIDE SWITCHES (1 mm PITCH)

OUTLINE DIMENSIONS



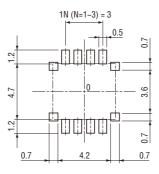
Unless otherwise specified, tolerance : \pm 0.3 (Unit : mm)



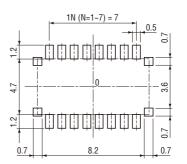
■ RECOMMENDED P.C.B. PAD OUTLINE DIMENSIONS

(Unit : mm)

• CVS-04B



• CVS-08B





COPAL ELECTRONICS



PACKAGING SPECIFICATIONS

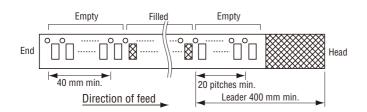
<Taping packaging specifications>

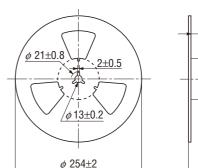
- Taping version is packaged in 2000 pcs. per reel. Orders will be accepted for units of 2000 pcs., i.e., 2000, 4000, 6000 pcs., etc.
- Taping version is boxed with two reels.

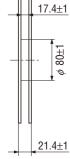
Maximum number of consecutive missing pieces = 2 Leader length and reel dimension are shown in the diagrams below:

• Embossed tape dimensions

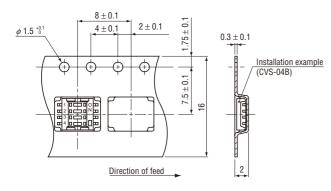
• Reel dimensions (Conforms to JIS C 0806-3) (In accordance with EIAJ ET-7200A) (Unit: mm)



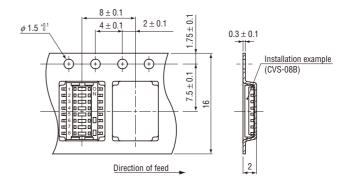




• CVS-04B



• CVS-08B



<Vinyl pack packaging specifications>

- The smallest unit of bulk in vinyl 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 vinyl bags is performed with 100 pcs. (standard 500 pcs.) per box.

Oct, 2004