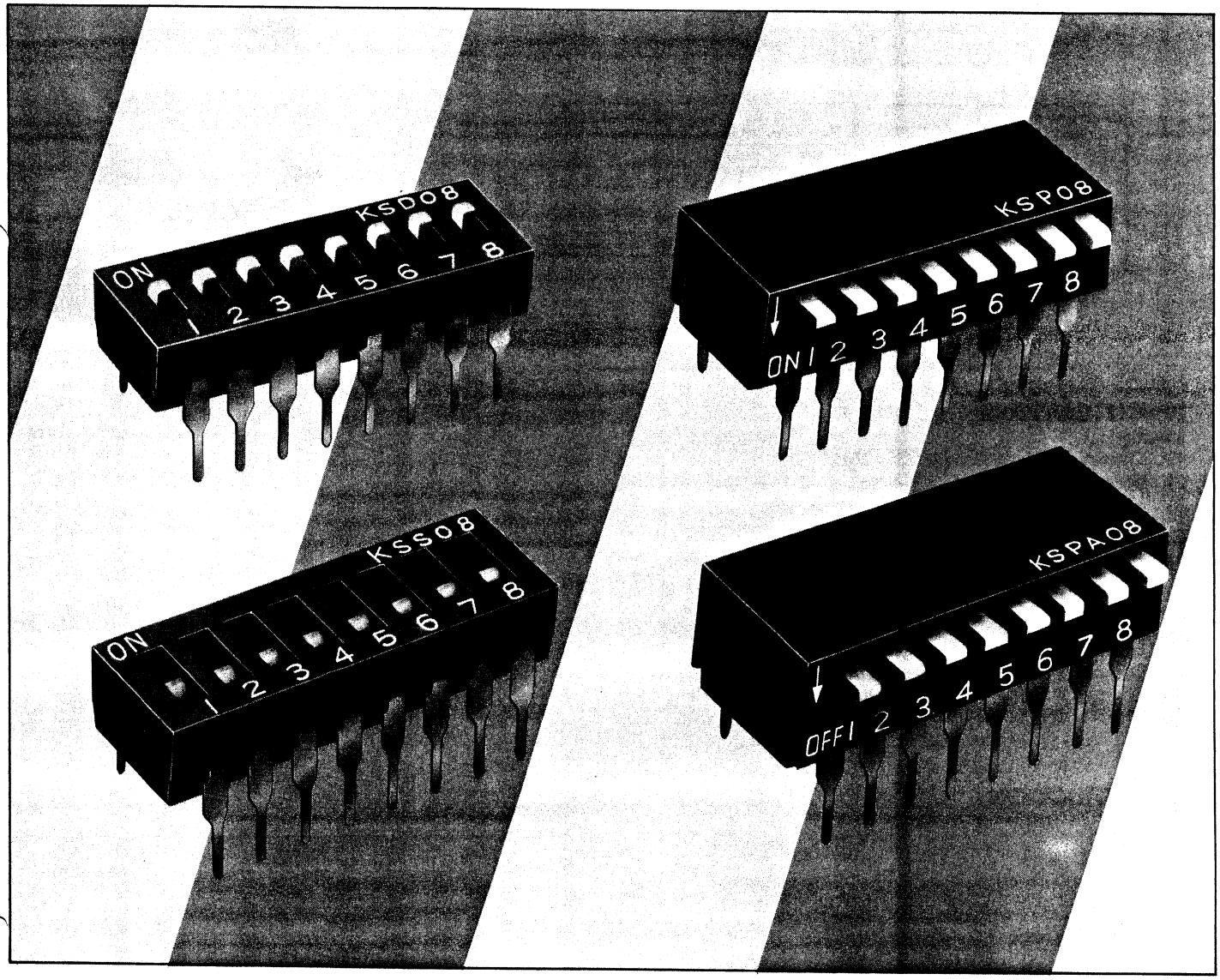
PAT. PEND.

SERIES K DIP SWITCH

KS *Very Small Dip Switch*

AUTO-INSERTION
AUTO-SOLDERING
AUTO-CLEANING
(TAPE SEALING UNNECESSARY)

DIP SWITCH



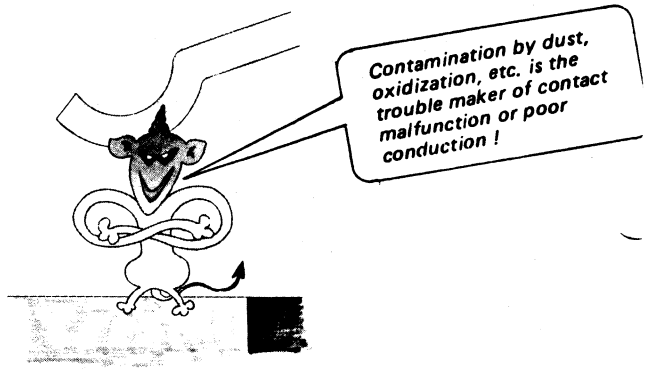
OTAX®

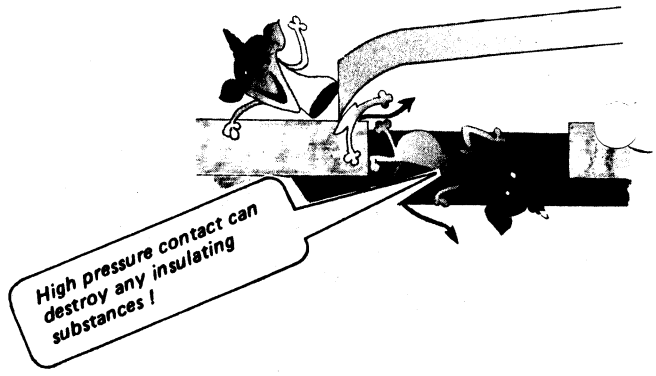
NEW OHTO CO., LTD.

THE KS SERIES overcomes the problem of heat strain that weakens thermoplastic resin by using ceramic substrates and are solidly constructed with a totally new design concept, making them mountable, flow solderable and cleansable automatically by the use of IC insertion machine and wave soldering machine.
The patented unique construction employs the exclusive knife-edge contact method coupled with slide wiping action, serving to create by far bigger contact pressure than most other DIP switches and to enhance reliability.

FEATURES

1) The heat resistance was greatly improved by employing ceramic substrates.
2) The exclusive knife-edge contact method always enssures stable contact regardless of solder flux or any other environmental hazards.
3) Contact pressure is as big as 200kg/mm^2 and immnue to accidental operation by shock or vibration.
4) Identical to ICs in terminal dimensions and configurations, making switches automatically mountable onto PC boards by the use of parts insertion machine for assembly work efficiency.
5) High pressure "knife-edge" contact is capable enough to break possibly formed film by oxidization or sulfurization, ensuring long life expectancy.
6) The cleaning solution can be used for a longer and is not neccesary to change as often as for the conventional ones.





ORDERING CODE

K S D A 0 8

Series

Non=ON type
A=OFF type

Code	Actuator
D	Slide type
S	Flat knob slide type
P	Piano key ON type
PA	Piano key OFF type (At the position pressed down)

Slide & Flat knob slide		Piano key ON & Piano key OFF	
Code	Pole	Code	Pole
02	2	02	2
03	3	03	3
04	4	04	4
05	5	05	5
06	6	06	6
07	7	07	7
08	8	08	8
09	9	09	9
10	10	10	10

SPECIFICATIONS

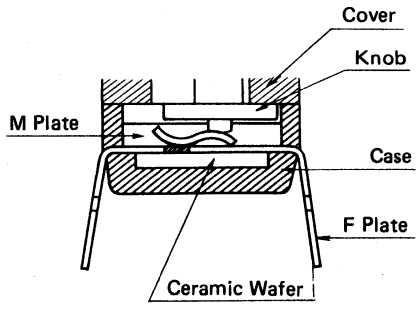
Mechanical

1) Operating Force: 800g Max.
2) Stroke: 1.3mm
3) Life: 1,000 cycles min.

Electrical

1) Rating: Non-switching. . . .1A Max.
   Switching. . . . . .0.1μA at 1mV min. 10mA 5VDC
2) Contact Resistance: 50mΩ Max. at 2VDC 10mA
3) Insulation Resistance: 100MΩ min. at 100VDC
4) Dielectric Strength: 1 min. at 500VAC
5) Contact Pressure: 200kg/mm^2
6) Life: 1,000 cycles min.

CONSTRUCTION

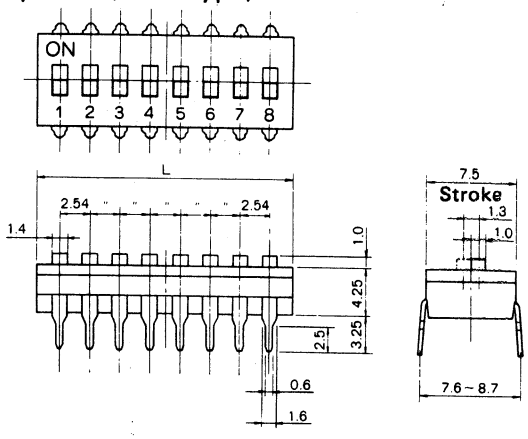


MATERIALS

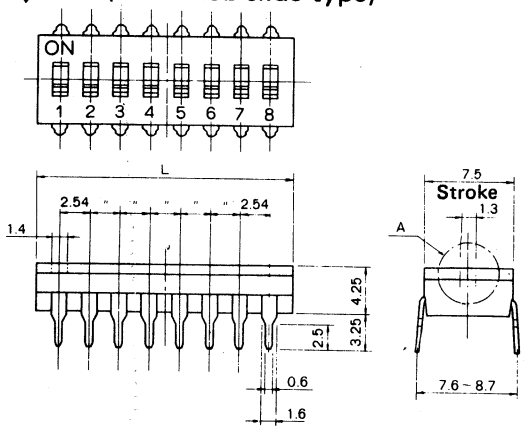
Parts	Material	Specification
Actuator	PBT	94V-0
Cover	PBT	94V-0
Case	PET	94V-0
Movable contact	Beryllium copper	Gold flash
Fixed contact	Brass	Solder coating
Wafer	Ceramic	

OUTER DIMENSIONS

✸KSD (Slide type)



✸KSS (Flat knob slide type)

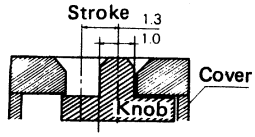


Model Coding

K S D ■ 0 2

None = ON type
A = OFF type

Section A

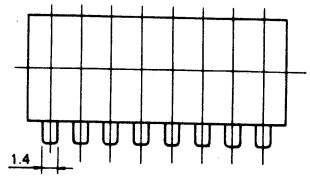


(At the position pressed down)

MODEL

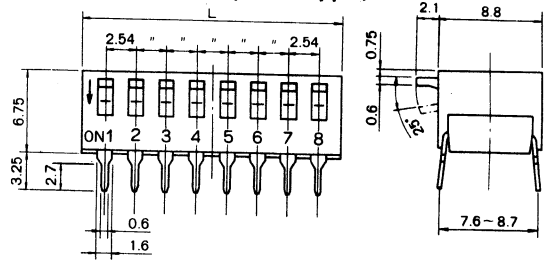
Slide type	Pole	L (mm)	L (inch)
KSD□02 KSS□02	2	7.06	0.278
KSD□03 KSS□03	3	9.60	0.378
KSD□04 KSS□04	4	12.14	0.478
KSD□05 KSS□05	5	14.68	0.578
KSD□06 KSS□06	6	17.22	0.678
KSD□07 KSS□07	7	19.76	0.778
KSD□08 KSS□08	8	22.30	0.878
KSD□09 KSS□09	9	24.84	0.978
KSD□10 KSS□10	10	27.38	1.078

Piano DIP (Piano Key ON type & OFF type)



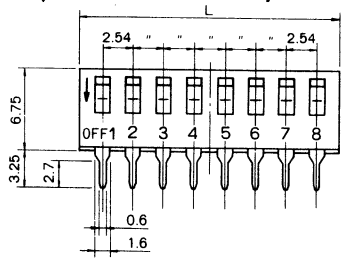
✸KSP (Piano key ON type)

* At the position pressed down.



✸KSPA (Piano key OFF type)

* At the position pressed down.



Model Coding

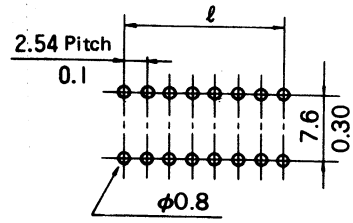
K S P ■ 0 2

Non = ON type
A = OFF type

MODEL

Piano type	Pole	L (mm)	L (inch)
KSP 02 KSPA02	2	7.06	0.278
KSP 03 KSPA03	3	9.60	0.378
KSP 04 KSPA04	4	12.14	0.478
KSP 05 KSPA05	5	14.68	0.578
KSP 06 KSPA06	6	17.22	0.678
KSP 07 KSPA07	7	19.76	0.778
KSP 08 KSPA08	8	22.30	0.878
KSP 09 KSPA09	9	24.84	0.978
KSP 10 KSPA10	10	27.38	1.078

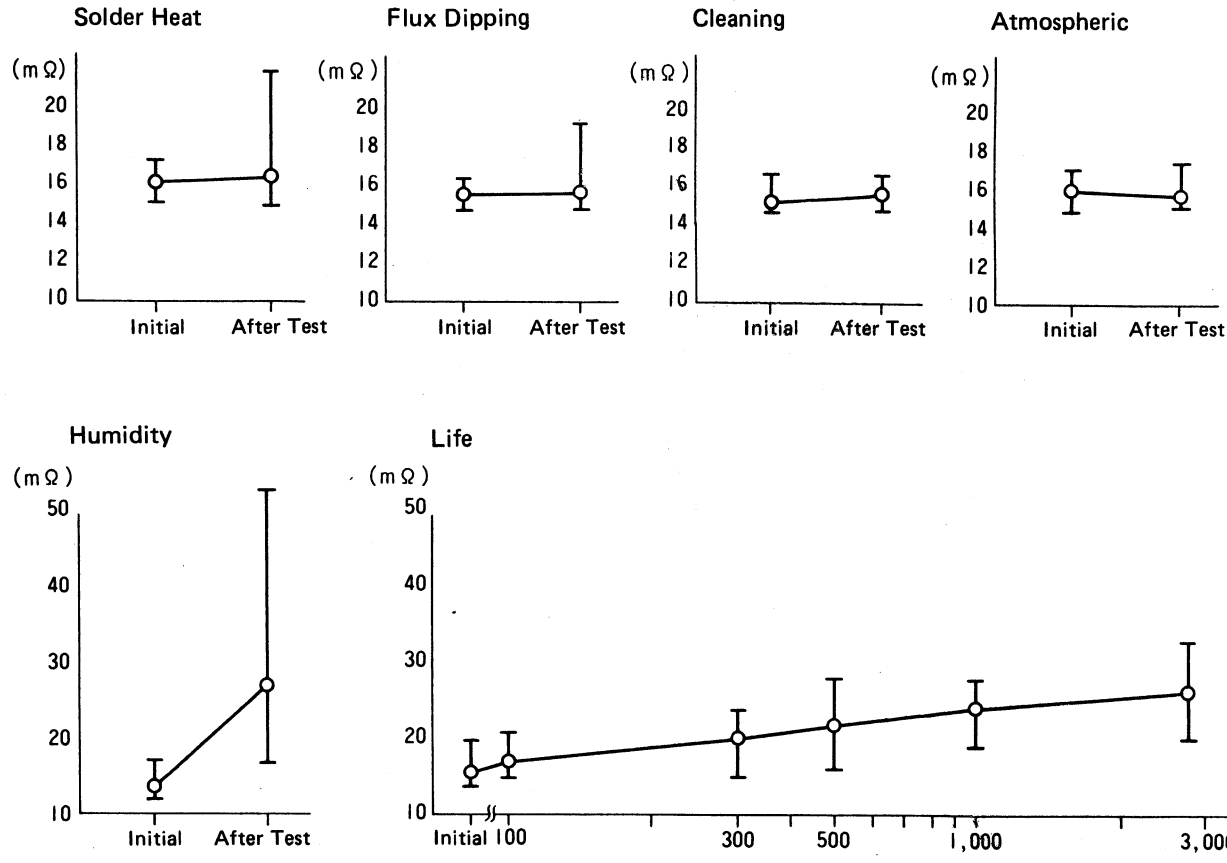
MOUNTING HOLE DIMENSIONS
(For all KSD, KSS, KSP and KSPA)



ENVIRONMENTAL PERFORMANCES

1) Operating temperature: −30°C to +85°C
2) Heat resistance: For 96 hours at the temperature of +100 ±3°C
3) Cold resistance: For 96 hours at the temperature of −45°C ±3°C
4) Humidity resistance: For 96 hours at the temperature of +40°C ±3°C and the relative humidity of 90 – 95%
5) Atmospheric test: For 240 hours under the atmosphere of 15 – 20 PPM sulfite gas at the temperature of +40°C
6) Solder heat resistance: For 15 sec. being mounted on to the 1.6mm thick PC board in a soldering cell of 285°C
7) Flux dipping test: For 10 sec. being dipped in a boiling flux with function set to "OFF" position
8) Cleaning test: 10 min. of ultrasonic cleaning is provided in dirty solution made up to 500g trichlene and 50g flux

TEST DATA



CAUTIONS

1. The product is supplied with the actuators at off position. So, maintain off position during mounting, soldering and cleaning processes.
2. Use only alcohol and chloride solvents for cleaning process.

AUTHORIZED DISTRIBUTORS/AGENTS

Further information and complete data will be given upon your request

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