NDS-DP-DA series

DIP switches

Distinctive features and specifications

UG1410A





- ❑ **Standard, piano and right angle models**
- ❑ **1 to 12 positions**
- ❑ **Top tape sealing option**

ELECTRICAL SPECIFICATIONS

- Current/voltage rating : 25mA 24VDC
- Initial contact resistance : 50mΩ max.
- Insulation resistance (at 500VDC) : 100 MΩ min. between adjacent terminals
- Dielectric strength : 500VDC for one minute
- Circuit : single pole, single throw
- Electrical life : 2.000 cycles min. per switch

MATERIALS

- Case, UL94-V0, glass fiber filled PBT, black
- Cover : UL94-V0,glass fiber filled PBT, red
- Actuator : UL94-V0, glass fiber filled PBT, white
- Terminals/contacts : gold over nickel plated phosphor bronze
- Terminal seal : epoxy
- Tape seal : polyester film

GENERAL SPECIFICATIONS

- Operating force :
  - NDS/DA models : 10N
  - DP models : 4N
- Travel :
  - NDS/DA : 2 mm (.078)
  - DP models : 30°
- Operating temperature :
  - DP/DA models : -20°C to +70°C
  - NDS models : -40°C to +85°C

RECOMMENDED SOLDERING AND CLEANING PROCESSES

- Hand soldering : 320°C max. for 2 seconds max. (30 watt iron max.)
- Wave soldering : 260°C max. for 5 seconds max.
- Force rinse, high agitation or triple bath cleaning method (**with tape seal, option T**) : freon TF or TE. When vapor methods are used, do not subject switch to solvents above 51°C.

Note : keep switches in "OFF" position during soldering and cleaning for best results.

Dimensions : first dimensions are in mm while inches are shown as bracketed numbers.

Packaging unit : standard IC tubes - Quantities depending on model. See table below.

NDS(R)	Quantity
NDS(R)-01	120
NDS(R)-02	72
NDS(R)-03	51
NDS(R)-04	40
NDS(R)-05	32
NDS(R)-06	27
NDS(R)-07	24
NDS(R)-08	21
NDS(R)-09	19
NDS(R)-10	17
NDS(R)-12	14

NDS(R)-T	Quantity
NDS(R)-01T	113
NDS(R)-02T	70
NDS(R)-03T	50
NDS(R)-04T	39
NDS(R)-05T	32
NDS(R)-06T	27
NDS(R)-07T	24
NDS(R)-08T	21
NDS(R)-09T	19
NDS(R)-10T	17
NDS(R)-12T	14

DA	Quantity
DA-02	73
DA-03	52
DA-04	40
DA-05	33
DA-06	28
DA-07	24
DA-08	21
DA-09	19
DA-10	17
DA-12	14

DA-T	Quantity
DA-02T	70
DA-03T	50
DA-04T	39
DA-05T	32
DA-06T	28
DA-07T	24
DA-08T	21
DA-09T	19
DA-10T	17
DA-12T	14

DP/DPL	Quantity
DP(L)-02	70
DP(L)-03	50
DP(L)-04	39
DP(L)-05	32
DP(L)-06	27
DP(L)-08	21
DP(L)-10	17
DP(L)-12	14

DP-T/DPL-T	Quantity
DP(L)-02T	65
DP(L)-03T	49
DP(L)-04T	39
DP(L)-05T	32
DP(L)-06T	27
DP(L)-08T	21
DP(L)-10T	17
DP(L)-12T	14

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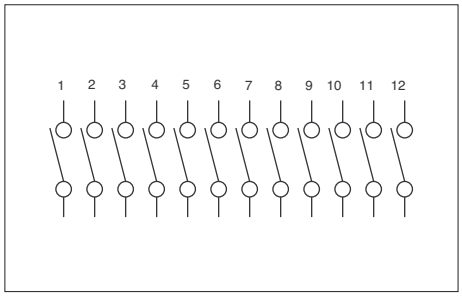
The company reserves the right to change specifications without notice.

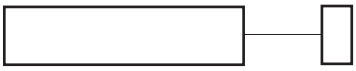
NDS/NDSR series

Standard DIP switches



- Raised or recessed actuator
- 1 to 12 positions

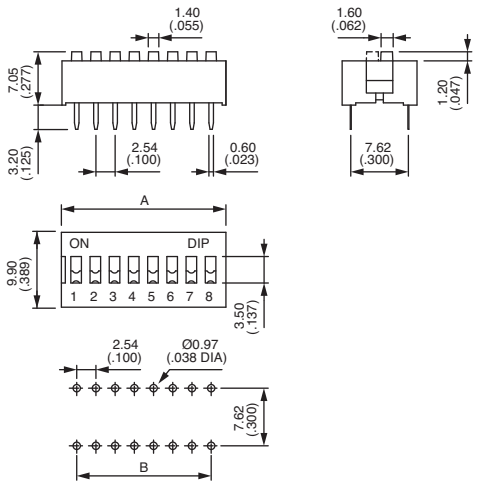
MODEL STRUCTURE



Raised actuator : NDS



Model No	No. pos.	Dim. "A"	Dim. "B"
NDS-01	1	4,22 (.166)	-
NDS-02	2	6,44 (.253)	2,54 (.100)
NDS-03	3	8,98 (.353)	5,08 (.200)
NDS-04	4	11,52 (.453)	7,62 (.300)
NDS-05	5	14,06 (.553)	10,16 (.400)
NDS-06	6	16,60 (.653)	12,70 (.500)
NDS-07	7	19,14 (.753)	15,24 (.600)
NDS-08	8	21,68 (.853)	17,78 (.700)
NDS-09	9	24,22 (.953)	20,32 (.800)
NDS-10	10	26,76 (1.053)	22,86 (.900)
NDS-12	12	31,84 (1.253)	27,94 (1.100)

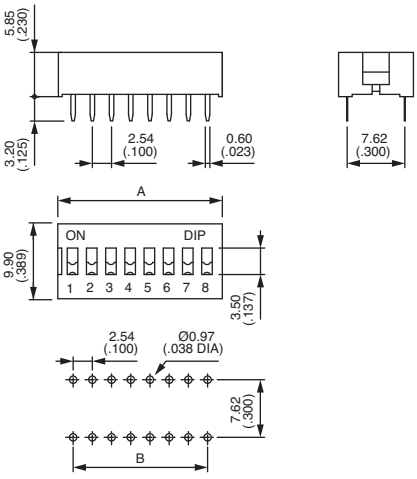


Top tape sealed : add "T" after model number.

Recessed actuator : NDSR



Model No	No pos.	Dim. "A"	Dim. "B"
NDSR-01	1	4,22 (.166)	-
NDSR-02	2	6,44 (.253)	2,54 (.100)
NDSR-03	3	8,98 (.353)	5,08 (.200)
NDSR-04	4	11,52 (.453)	7,62 (.300)
NDSR-05	5	14,06 (.553)	10,16 (.400)
NDSR-06	6	16,60 (.653)	12,70 (.500)
NDSR-07	7	19,14 (.753)	15,24 (.600)
NDSR-08	8	21,68 (.853)	17,78 (.700)
NDSR-09	9	24,22 (.953)	20,32 (.800)
NDSR-10	10	26,76 (1.053)	22,86 (.900)
NDSR-12	12	31,84 (1.253)	27,94 (1.100)



Top tape sealed : add "T" after model number.

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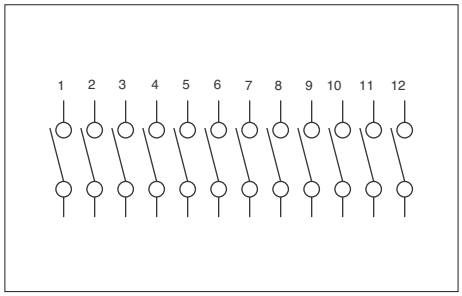
DP/DPL series

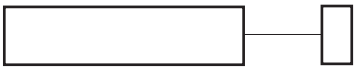
Piano DIP switches



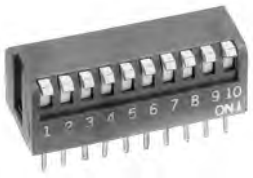
- Short or long actuator
- 2 to 12 positions

Note : Push down for "ON" is our standard type.
Push down for "OFF" is also available on special order, consult factory.

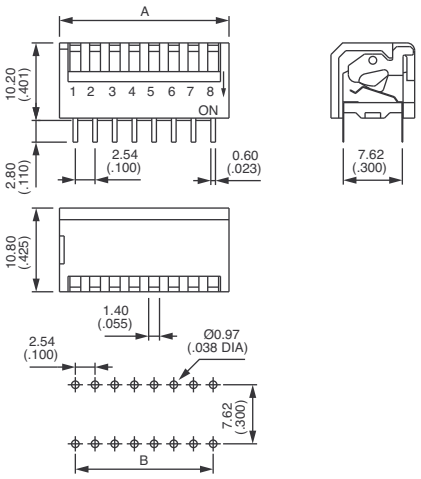
MODEL STRUCTURE



Short actuator : DP



Model No	No. pos.	Dim "A"	Dim. "B"
DP-02	2	6,44 (.253)	2,54 (.100)
DP-03	3	9,18 (.361)	5,08 (.200)
DP-04	4	11,72 (.461)	7,62 (.300)
DP-05	5	14,26 (.561)	10,16 (.400)
DP-06	6	16,80 (.661)	12,70 (.500)
DP-08	8	21,88 (.861)	17,78 (.700)
DP-10	10	26,96 (1.061)	22,86 (.900)
DP-12	12	32,04 (1.261)	27,94 (1.100)

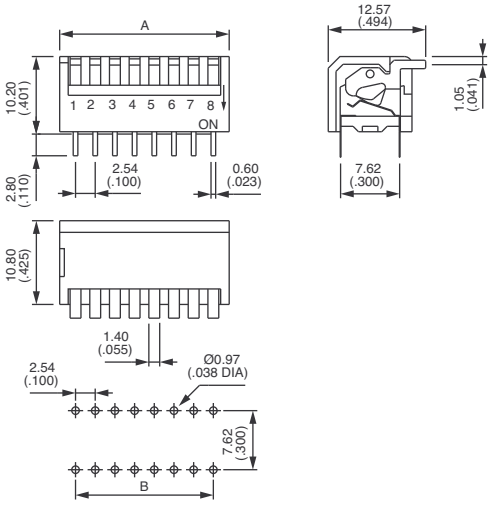


Top tape sealed : add "T" after model number.

Long actuator : DPL



Model No	No. pos.	Dim "A"	Dim. "B"
DPL-02	2	6,44 (.253)	2,54 (.100)
DPL-03	3	9,18 (.361)	5,08 (.200)
DPL-04	4	11,72 (.461)	7,62 (.300)
DPL-05	5	14,26 (.561)	10,16 (.400)
DPL-06	6	16,80 (.661)	12,70 (.500)
DPL-08	8	21,88 (.861)	17,78 (.700)
DPL-10	10	26,96 (1.061)	22,86 (.900)
DPL-12	12	32,04 (1.261)	27,94 (1.100)



Top tape sealed : add "T" after model number.

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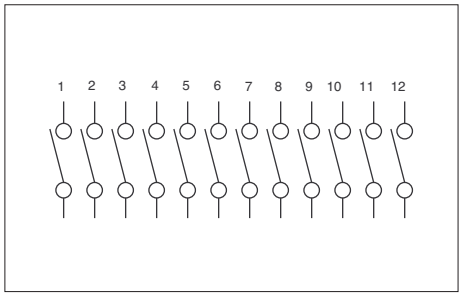
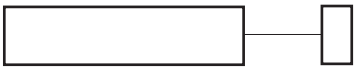
DA series

Right angle DIP switches



- 2 to 12 positions

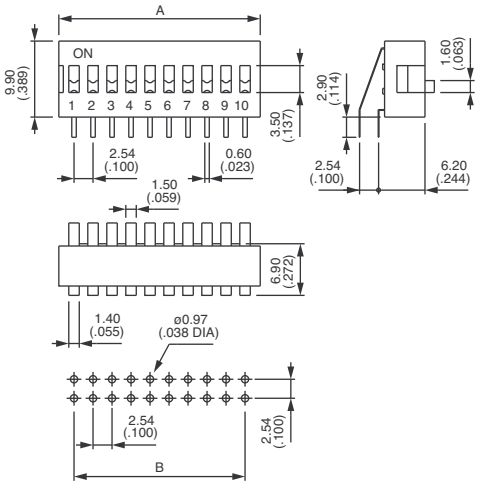
MODEL STRUCTURE



Raised actuator : DA



Model No	No. pos.	Dim "A"	Dim. "B"
DA-02	2	6,44 (.253)	2,54 (.100)
DA-03	3	8,89 (.350)	5,08 (.200)
DA-04	4	11,52 (.453)	7,62 (.300)
DA-05	5	14,06 (.553)	10,16 (.400)
DA-06	6	16,60 (.653)	12,70 (.500)
DA-07	7	19,14 (.753)	15,24 (.600)
DA-08	8	21,68 (.853)	17,78 (.700)
DA-09	9	24,22 (.953)	20,32 (.800)
DA-10	10	26,76 (1.053)	22,86 (.900)
DA-12	12	31,84 (1.253)	27,94 (1.100)



Top tape sealed : add "T" after model number.

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