# NDI & DM SERIES SPST STANDARD DIP SWITCHES

#### **FEATURES**

High reliability.
Self-cleaning contacts.
Multi- positions.
Process compatible with tape seal.
Dual in-line .100" x .300" term. spacing.

# **GENERAL SPECIFICATIONS**

#### **ELECTRICALS**

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

Electrical life 2000 cycles min. per switch @ 24 VDC, 25 mA

Contact rating, non-switching 100 mA at 50 VDC Contact rating, switching 25 mA at 24 VDC

Contact resistance at current 100 mA 50 milliohms max. initial - 100 milliohms max. after life test

Insulation resistance at 500 VDC 100 Megohms minimum
Dielectric strength 500 VAC for 1 minute

Capacitance 5 pf. max. between adjacent terminals

## **MECHANICALS, THERMALS**

Mechanical life 2000 cycles min. per switch

Operating force 1000 grams max.

Vibration 10-55 Hz.per MIL-STD-202F METHOD 201A

Shock 50 G (peak value) for 11 msec. per MIL-STD-202F, METHOD 213B

Operating temperature range -20°C to 85°C

#### **SOLDERING & CLEANING RECOMMENDATIONS\***

Hand soldering 350°C max. for 2 seconds max.(30 watt iron max.)

Wave soldering 260°C max. for 5 seconds max. Cleaning (with tape seal) Spray wash from top side only.

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

# **MATERIALS**

Base & Cover NDI: UL94V-O, glass fiber filled PBT, black

DM: UL94V-O, glass fiber filled PPS, black

Actuators UL94V-O, Nylon, white

Contacts Gold over nickel plated copper alloy

Terminals Gold plated brass.

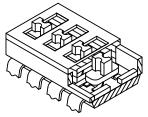
Term. Sealing Molded-in Tape seal Kapton

#### **PACKAGING**

DIP switches are shipped in standard IC tubes with all actuators in the "OFF" position. Tape & reel packaging per EIA available for DMR models (see next page).

## SWITCH CROSS SECTIONS

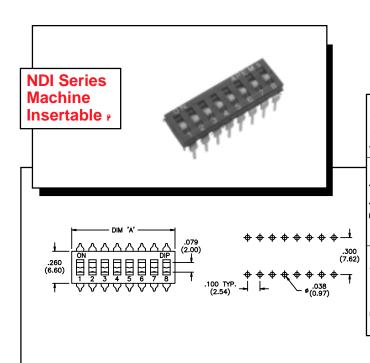
Double contact system



DI & DM

# SCHEMATIC (TYPICAL)

See tabulations on following pages for number of positions available (10 shown)



	Squared terminals		Spread terminals				
Actuator	MODEL NO. with no tape seal	MODEL NO. with tape seal	MODEL NO. with no tape seal	MODEL NO. with tape seal	No. of Pos.	'A' E +.008/ (+0.2/-	
Raised	NDI01H	n/a	NDI01S	n/a	1	.137	(3,48)
	NDI02H	n/a	NDI02S	n/a	2	.237	(6,02)
	NDI04H	n/a	NDI04S	n/a	4	.437	(11.10)
	NDI06H	n/a	NDI06S	n/a	6	.637	(16,18)
	NDI08H	n/a	NDI08S	n/a	8	.837	(21,26)
	NDI10H	n/a	NDI10S	n/a	10	1.037	(26,34)
Recessed	NDIR01H	n/a	NDIR01S	n/a	1	.137	(3,48)
	NDIR02H	NDIR02HT	NDIR02S	NDIR02ST	2	.237	(6,02)
	NDIR04H	NDIR04HT	NDIR04S	NDIR04ST	4	.437	(11,10)
	NDIR06H	NDIR06HT	NDIR06S	NDIR06ST	6	.637	(16,18)
	NDIR08H	NDIR08HT	NDIR08S	NDIR08ST	8	.837	(21,26)
	NDIR10H	NDIR10HT	NDIR10S	NDIR10ST	10	1.037	(26,34)

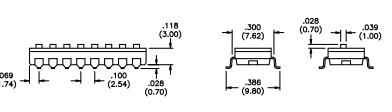
Auto-insertable using equipment from Amistar, Dynapert, Panasert, Northeastern Tool, Universal and others.

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n/a = not available.

DM Series Surface Mount	22.22.23
Mount P	

DIM 'A'	.291 (7.40) .409 (10.40) .043 (1.10) .100 (2.54)
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Actuator Style	MODEL NO. with no tape seal	MODEL NO. with tape seal	No. of Pos.	'A' Dimension +.008/000" (+0.2/-0.0mm)	
Raised	DM01	n/a	1	.137	(3,48)
Actuator	DM02	n/a	2	.237	(6,02)
	DM03	n/a	3	.337	(8,56)
	DM04	n/a	4	.437	(11,10)
	DM05	n/a	5	.537	(13,64)
	DM06	n/a	6	.637	(16,18)
	DM07	n/a	7	.737	(18,72)
	DM08	n/a	8	.837	(21,26)
	DM09	n/a	9	.937	(23,80)
	DM10	n/a	10	1.037	(26,34)
	DM12	n/a	12	1.237	(31.42)
Recessed	DMR01	n/a	1	.137	(3,48)
Actuator	DMR02	DMR02T	2	.237	(6,02)
	DMR03	DMR03T	3	.337	(8,56)
	DMR04	DMR04T	4	.437	(11,10)
	DMR05	DMR05T	5	.537	(13,64)
	DMR06	DMR06T	6	.637	(16,18)
	DMR07	DMR07T	7	.737	(18,72)
	DMR08	DMR08T	8	.837	(21,26)
	DMR09	DMR09T	9	.937	(23,80)
	DMR10	DMR10T	10	1.037	(26,34)
	DMR12	DMR12T	12	1.237	(31.42)

For tape & reel packaging on DMR models only, add 'TR' to model number - example: DMR08TTR. Note- tape & reel packaging is available only with tape seal models. 900 switches per reel.

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