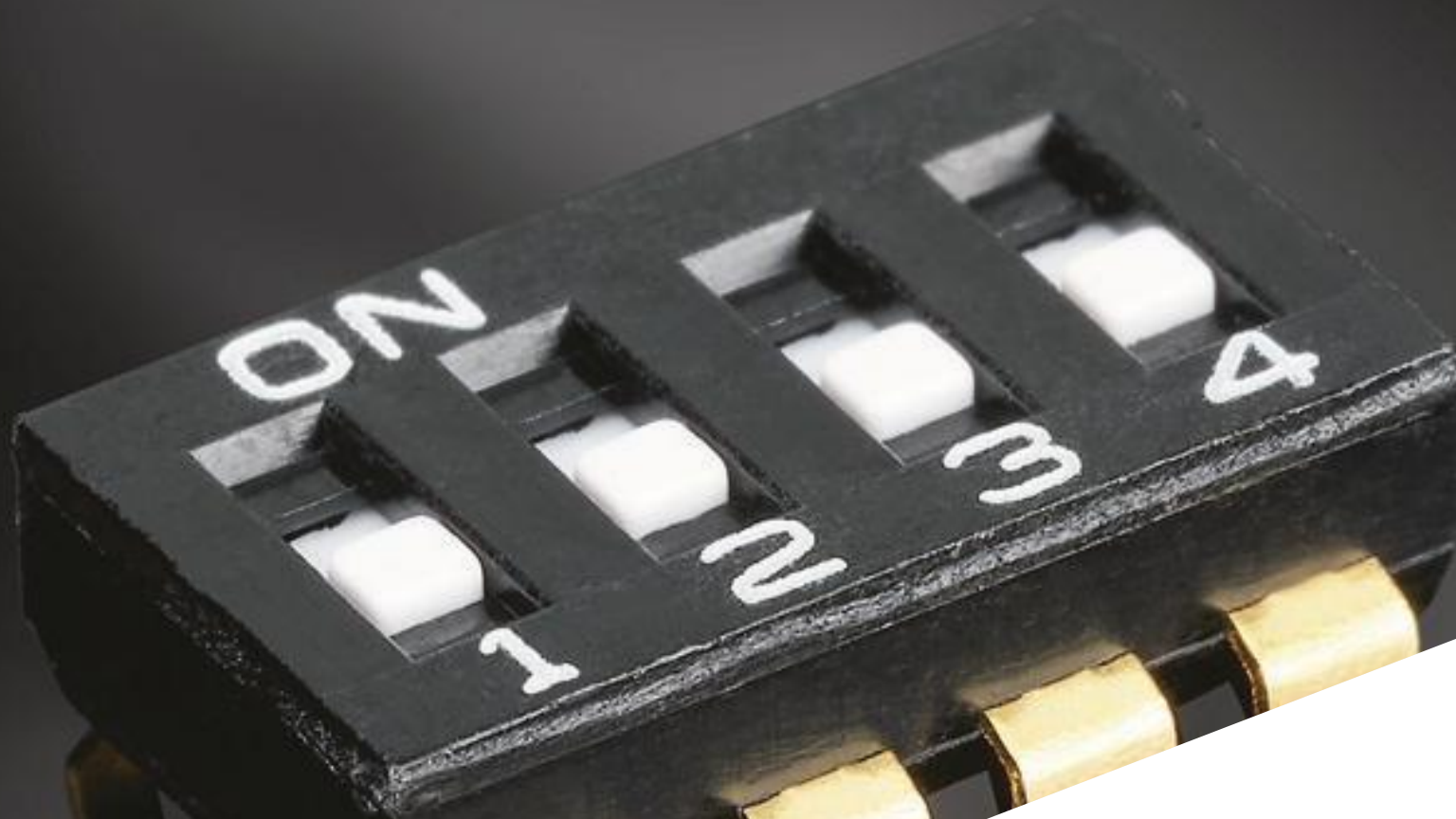




DMSD: Low profile SMD DIP Switch

 **SCHURTER**
ELECTRONIC COMPONENTS



Industry Trends

The DMSD Type DIP switches as the most standard 2.54 mm pitch, low profile DIP with SMD terminal, which is both significant important together with the DMTH with through hole terminal type, representing a significant opportunity for manufacturers looking to capitalize on the growing demand for reliable, compact electronic components. With applications spanning industrial controls, consumer electronics, computer peripherals, and medical devices, these components are well-positioned for substantial growth in the coming years.

> Address communication /Logic switching / Function controlling

> The most common and standard Form Factor

DMSD – USP and Product Features

- 2.54mm standard pitch design
- Low profile design
- Gullwing SMD terminal design
- High number of cycles

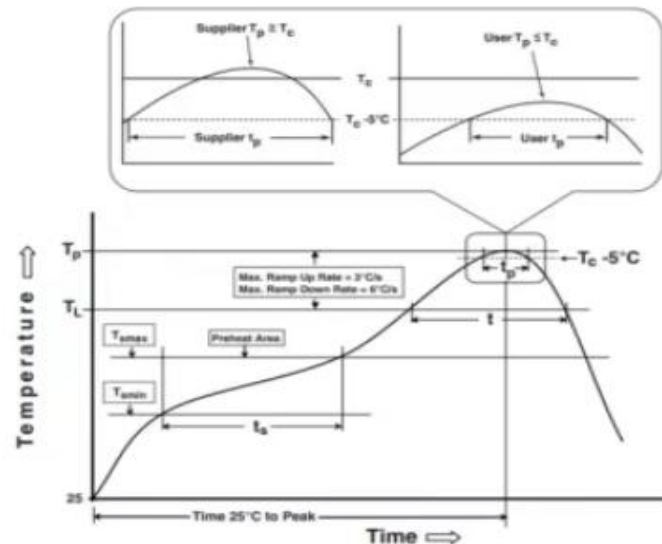


DMSD– Specification



Reflow soldering conditions (Reference standard: J-STD-020)

1. Preheat ----- 150°C-200°C, 60-120 (sec)
2. Peak temperature --- 260°C max. 5-10 (sec)
3. Soldering area temperature ----- 217°C, 60-150 (sec)

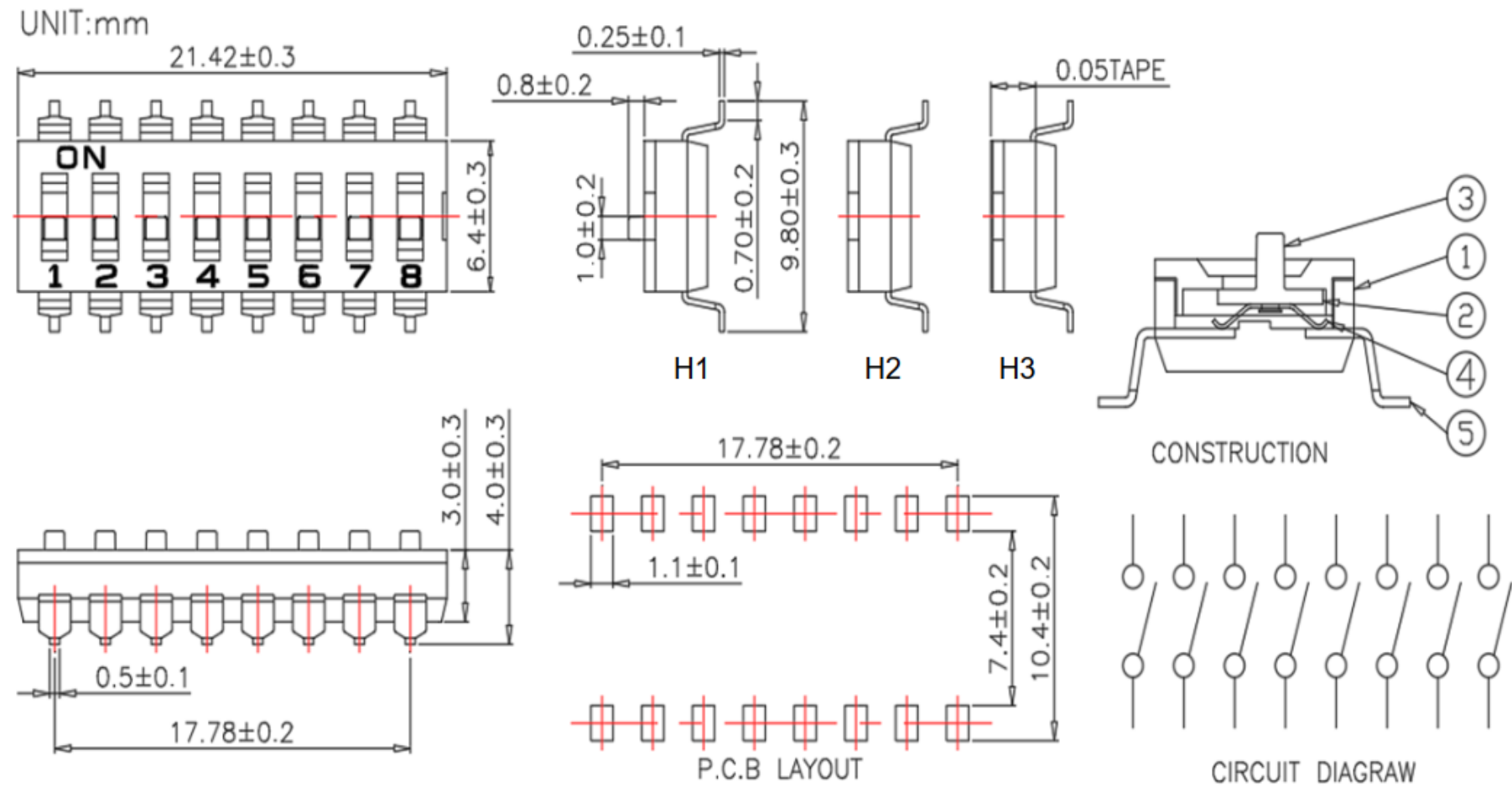


- Operation force: $\leq 8\text{N}$
- Mechanical life: 2000 cycles
- Operating Temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Storage Temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Solderability: $245 \pm 5^{\circ}\text{C}$, $5 \pm 0.5\text{s}$
- Resistance to soldering heat: $260 \pm 5^{\circ}\text{C}$, $5 \pm 1\text{s}$, 2 times
- Contact resistance (initial) : $\leq 100\text{m}\Omega$
- Contact resistance(after test): $\leq 200\text{m}\Omega$
- Electrical Rating: 25mA@24V (status changed often)
 - 100mA@50V (status constant)
- Dielectric strength: No breakdown at 500V (50Hz~60Hz, 1min)

DMSD– Key Parameters

Product Photo	
Product type	DMSD
Pitch	2.54mm the most standard pitch
Soldering Type	Reflow soldering
Height	3.6mm
Width	6.4mm
Width of PCB layout	10.4mm
No. of Positions	01~10, 12
Contact Type	SPST
Actuator type	Recessed actuator with or without Mylar Raised Actuator
Package	Options of Tube, Tape & Reel

DMSD– Dimensions (Taking 8 positions as example)



DMSD– Typical Applications



Robots

Parameters (speed, etc.) /working mode set/debugging/ address communication/Algorithm selection



PCL Controls

Address setting / Communication protocol (RS485, Modbus), etc. / Function configuration



Air conditioner

Address setting / Communication protocol (RS485, Modbus), etc. / Function configuration / High & low frequency / Advanced function



Coffee maker

Coffee parameter setting (grinding speed / coffee strength / working mode / Advanced function settings)



Medical device

Basic parameter configuration (paper feeding speed / sensitivity, etc.) / Lead mode selection (3, 5, 12) / Filtering frequency



Computer station/Industrial server

System Settings (CMOS/BIOS)
Hardware Parameter Configuration (CPU frequency / memory frequency / voltage adjustment, etc.)

DMSD– Order number key

D	M	S	D	-	02	-	H2	-	S	-	TR
1					2		3		4		5

Typ  **1**
DMSD = DMSD

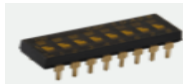
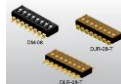
Anzahl der Positionen  **2**
01 = 01
02 = 02
03 = 03
04 = 04
05 = 05
06 = 06
07 = 07
08 = 08
09 = 09
10 = 10
12 = 12

Betätiger  **3**
Raised actuator = H1
Recessed actuator = H2
Recessed actuator film = H3

Anschluss  **4**
Gullwing = S

Verpackung  **5**
Tape & Reel = TR
Tube = TU

DMSD– Main Competition Globally

Brand	Schurter	Schurter	C&K	TE	Diptronics
Product Photo					
Product type	DMSD	DMTH	SDA	ADE/ADF	DM, DJ, DL
Pitch	2.54mm SMT version	2.54mm THT version	2.54mm THT & SMT	2.54mm THT & SMT	2.54mm SMT version
Soldering Type	SMD reflow	THT wave soldering	Reflow and Wave soldering	Reflow and Wave soldering	Reflow and Wave soldering
Height	3.6mm	3.6mm	4.45mm	3.5mm	3.7mm
Width	6.4mm	6.4mm	7.49mm	didn't clear	6.2mm
No. of Positions	01~10, 12	01~10, 12	01~10, 12	02~12	01~10, 12
Contact Type	SPST	SPST	SPST	SPST	SPST
Actuator type	Raised Actuator	Raised Actuator	Raised Actuator	Raised Actuator	Raised Actuator
	Recessed actuator	Recessed actuator		Recessed actuator	Recessed actuator
	Recessed actuator with Mylar	Recessed actuator with Mylar	Recessed actuator with Mylar		Recessed actuator with Mylar
Package	Tape & Reel Tube	Tube	Tape & Reel Tube	Tape & Reel Tube	Tape & Reel Tube

Top competition:

- C&K SDA series and Grayhill 90series actually as the premium-priced manufacturer looking more on margin with offering stable performance and strategy centers on global key accounts positioning as a "high-reliability solution" rather than competing on cost.
- TE players appear to balance market and price with more focusing on industrial customer and OEM design won.
- Diptronics is stronger on price competition with also wide range of product solutions of DIP, prioritizes cost control through manufacturing cost control. Their strategy also hinges on volume sales, using lower margins to capture market share in price-sensitive scenarios for example in datacenter and high end consumer.

DMSD Further Information

Additional Information

- Data Sheet: [DMSD](#)
- On Digital Asset Management System [DAM](#) to download:
 - Latest press releases
 - Training presentations

Technical Assistance

- > For general product questions, contact your Inside Sales Representative.



Daisy Liu

Global Product Manager

21.07.2026

SCHURTER AG
Werkhofstrasse 8-12
PO Box
6002 Lucerne Switzerland

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