# **CUI** DEVICES

date 12/02/2019

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SERIES: DS04-254-SMT | DESCRIPTION: DIP SWITCH

#### **FEATURES**

- 2.54 mm pitch
- 1~12 pole options
- raised or flat actuator option
- surface mount
- tube or tape & reel packaging

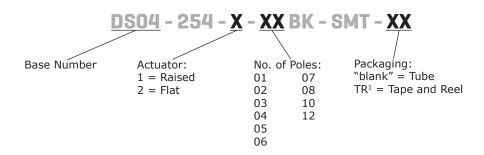




#### **SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
rated voltage (per pole)	switching non-switching			24 50	Vdc Vdc
rated current (per pole)	switching non-switching			25 100	mA mA
withstanding voltage	for 1 minute		500		Vac
contact resistance	initial after life test			50 100	mΩ mΩ
insulation resistance	at 500 Vdc	100			МΩ
operating force				1000	g
switch travel				0.9	mm
operating temperature		-40		85	°C
storage temperature		-40		85	°C
life		2000			cycles
flammability rating	UL94V-0				
RoHS	yes				

### **PART NUMBER KEY**



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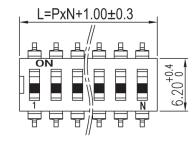
## **MECHANICAL DRAWING**

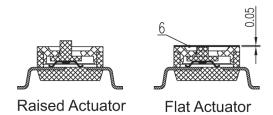
units: mm tolerance:

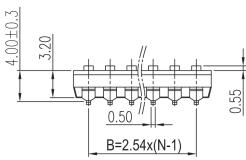
0.5<X≤3.0: ±0.15 mm 3.0<X≤6.0: ±0.20 mm 6.0<X≤30.0: ±0.25 mm 30.0<X≤120.0: ±0.30 mm 120.0<X≤400.0: ±0.50 mm X>400.0: ±0.80 mm unless otherwise noted

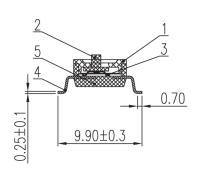
ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
1	housing	PBT (UL94V-0)	black
2	actuator	PBT (UL94V-0)	white
3	contact	copper alloy	gold
4	pins 1,2	copper alloy	gold
5	base	PBT (UL94V-0)	black
6	tape	polyimide	

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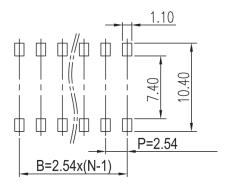












Recommended PCB Layout Top View

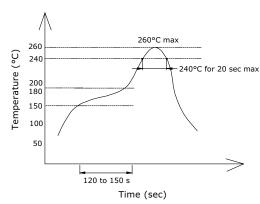
This series is constructed of single piece modules where L is the total length, P is the pitch, and N is the number of poles.										
N	01	02	03	04	05	06	07	08	10	12
L	3.54	6.08	8.62	11.16	13.70	16.24	18.78	21.32	26.40	31.48
В		2.54	5.08	7.62	10.16	12.70	15.24	17.78	22.86	27.94

SECTION: A-A

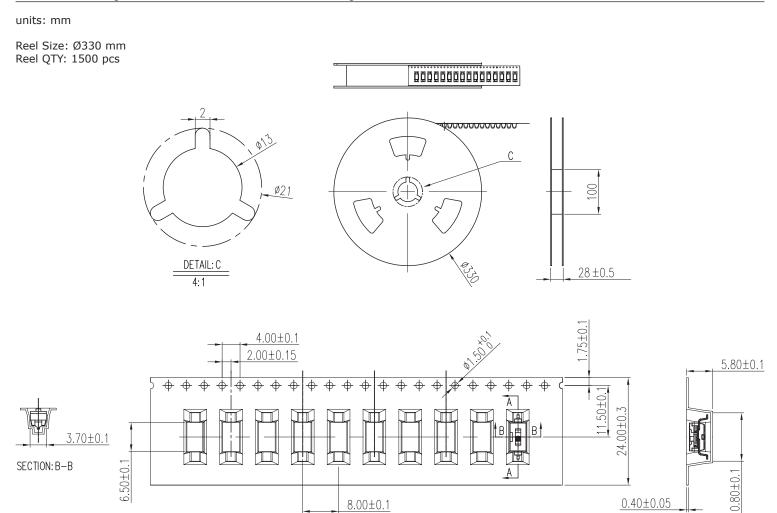
## **SOLDERABILITY**

parameter	conditions/description	min	typ	max	units
hand soldering <sup>2</sup>	for maximum 3 seconds	315	320	325	°C
reflow soldering <sup>2</sup>	240~260 °C (20 seconds max)			260	°C

Notes: 2. Keep in "off" position during soldering.



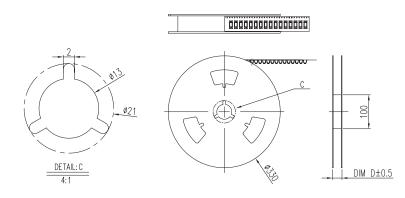
## PACKAGING (TAPE & REEL, 1 POLE MODELS)



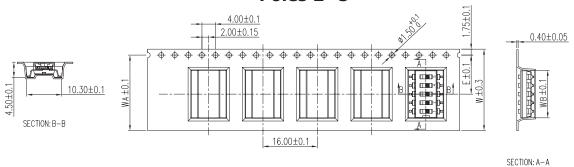
## PACKAGING (TAPE & REEL, 2~12 POLE MODELS)

units: mm

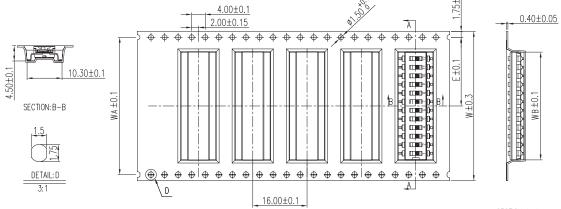
Reel Size: Ø330 mm



### Poles 2~5







SECTION: A-
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Tape Dimensions							
#Poles	W (mm)	WA (mm)	WB (mm)	E (mm)	D (mm)	QTY	
2	16.00	14.55	6.26	7.50	20	800	
3	16.00	14.55	8.92	7.50	20	800	
4	24.00	22.25	11.46	11.50	28	800	
5	24.00	22.25	14.00	11.50	28	800	
6	32.00	28.50	16.54	14.20	36	800	
7	32.00	28.50	19.08	14.20	36	800	
8	32.00	28.50	21.62	14.20	36	800	
10	44.00	40.50	26.70	20.25	48	800	
12	44.00	40.50	31.78	20.25	48	800	

Additional Resources: Product Page | 3D Model | PCB Footprint

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#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	12/02/2019

The revision history provided is for informational purposes only and is believed to be accurate.

# **CUI** DEVICES

CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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CUI Devices products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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**Authorized Distributor** 

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## **CUI Devices:**

DS04-254-2-07BK-SMT-TR DS04-254-2-03BK-SMT-TR DS04-254-2-01BK-SMT-TR DS04-254-2-10BK-SMT-TR DS04-254-2-10BK-SMT DS04-254-2-10BK-SMT DS04-254-2-04BK-SMT DS04-254-1-04BK-SMT DS04-254-1-04B