

## DBG/DNG Series

TRI-STATE TYPE



Automatic inserting type



Surface mounting type

### FEATURES

- With three states (1, open, 0) setting function, especially suitable for encoding/decoding of tri-state encoder/decoder integrated circuit to obtain more security codes than traditional two-state (1,0) operation. For instance, 9 bits with tri-state gets 19,683 ( $3^9$ ) codes, while two-state has 512 ( $2^9$ ) codes, gain 38 times more codes with a PACER tri-state DIP switch
- All plastics are UL 94V-0 grade fire retardant
- Gold plated contact to ensure low contact resistance and Tin plated terminals to prevent contamination during soldering
- Twin contacts designed to ensure stable contact
- Ideal for coding tele-communication, transceiving, remote control and burglar alarm systems which use intergrated circuits with tri-state coding systems
- RoHS Compliant

### SPECIFICATIONS

#### 1. ELECTRICAL

Contact rating	
switching	25 mA, 24 VDC
non-switching	100 mA
Contact resistance	
initial	50 mΩ Max.
after life test	100 mΩ Max.
Insulation resistance	1,000 MΩ Min. at 100 VDC
Dielectric strength	500 VDC Min. for 1 minute
Capacitance between adjacent switches	5 pF Max

#### 2. MECHANICAL and ENVIRONMENTAL

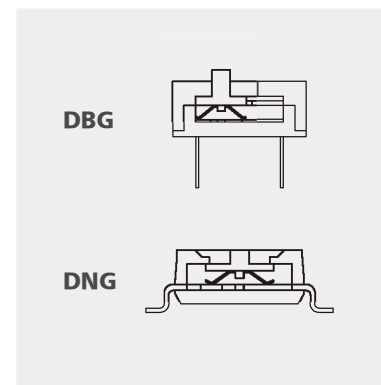
Temperature rating	
operating	-40°C to +85°C
storage	-40°C to +85°C
Operation force	800g Max.
Mechanical life	2,000 operations
Humidity	95%RH, 40°C for 96 Hrs.
Vibration	10Hz - 55Hz - 10Hz for 6 Hrs.
Solderability	After flux 245±5 °C for 5 ± 1 second
(for through hole type)	
Resistance to soldering heat	
Solder bath	260±5°C for 5±1 second
Solder reflow	Peak temperature 260°C Max

Reflow soldering process for SMT type Reference IEC61760

### APPLICATIONS

- Numerical setting for computer terminal equipment
- Price setting for vending machines
- Programming for game machines
- Programming for industrial equipment and measuring instruments

### CONSTRUCTION



## PART NUMBERING SYSTEM

<b>D B G</b>							<b>F</b>	
<b>D N G</b>								
Series name		No. of positions		Sealing		Packaging		RoHS compliant
Contact form		Actuator		Row spacing (for DBG series only)				

Series name	
<b>D B G</b>	Automatic inserting type
<b>D N G</b>	Surface mounting type

Contact form	
<b>1</b>	SPST

No. of positions	
<b>0 2</b>	<b>0 7</b>
<b>0 3</b>	<b>0 8</b>
<b>0 4</b>	<b>0 9</b>
<b>0 5</b>	<b>1 0</b>
<b>0 6</b>	<b>1 2</b>

Actuator	
<b>E</b>	Extended actuator
<b>L</b>	Low profile actuator

Sealing	
	Without top tape sealed
<b>T</b>	With top tape sealed

Row spacing (for DBG series only)	
	Row spacing 8.5mm
<b>3</b>	Row spacing 7.62mm

Packaging	
	Tube packaging
<b>C</b>	Tape & Reel Packaging(for DNG series only)

## DIMENSIONS AND CIRCUITRY

Unit mm (inch)

DBG-1□□E3F / DBG-1□□LF Automatic inserting type	DNG-1□□EF / DNG-1□□LF Surface mounting type
---	---

DIMENSION A	Unit : mm(inch)											
POSITIONS	2	3	4	5	6	7	8	9	10	12		
A	6.68 (0.263)	9.22 (0.363)	11.76 (0.463)	14.30 (0.563)	16.84 (0.663)	19.38 (0.763)	21.92 (0.863)	24.46 (0.963)	27.00 (1.163)	32.08 (1.263)		

## OPTIONS

- Tape sealed.
 

DNG-1□□LTF

DBG-1□□LTF
- Reverse P.C.B. LAYOUT available.