

The D6 is a single-pole, momentary action, normally open keyswitch specially designed for digital electronic controls. Its small size enables keyboard design with minimum center spacing of $12.7 \mathrm{~mm}(0.500)$.
The commoned terminals offer the possibility of $X, Y$ coding on just a single sided printed circuit board.
A total travel of $0.8 \mathrm{~mm}(0.0315)$ combined with a snap effect provides the user with a smooth, gentle, yet positive tactile feedback.
Built-in buttons (square or round) are available in several colors and have been designed to fit directly on front panels.
The D6 version with plunger $3.3 \times$ $3.3 \mathrm{~mm}(0.130 \times 0.130)$ can accept any standard or customer-designed button.
Flat D6 can be actuated with customer designed buttons or behind a membrane. A version exists for high temperature, resisting wave soldering in severe conditions. This type is offered only in black.

## Applications

- Video, TV sets, remote control, video and disc recorder
- Audio, car radio, portable radio
- Test and measuring equipment
- Automobiles
- Electronic games
- Domestic appliances
- Telephones and intercoms

| Construction |  |
| :---: | :---: |
| Function | Momentary |
| Contact arrangement | 1 make contact = SPST, NO |
| Distance between button centers, min. | 12.7 mm ( 0.500 inch ) |
| Contacts | PC pins |
| Electrical data |  |
| Switching power max. | 6 VA |
| Switching voltage max. | 100 V AC |
| Switching current max. | 100 mA AC |
| Dielectric strength ( $50 \mathrm{~Hz} / 1 \mathrm{Min}$.) | 1000 V AC |
| Operating life with max. switching power | $\geqq 2.5 \times 10^{5}$ operations |
| Contact resistance | $\leqq 100 \mathrm{~m} \Omega$ |
| Insulation resistance | $\geqq 10^{11} \Omega$ |
| Contact bounce | $\leqq 3 \mathrm{~ms}$ |
| Mechanical data |  |
| Switching travel | $0.8 \pm 0.2(0.031 \pm 0.0078)$ |
| Operating force | $1.3 \mathrm{~N} \pm 30 \%$ ( $130 \mathrm{grams} \pm 30 \%$ ) |
| Further data |  |
| Contact material | Silver plated |
| Insulation material base | PBT (white color) <br> PBT for high temperature (blue color) |
| button | ABS high temperature |
| Operating temperature | $-20^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| Climatic category | 21 days at $40^{\circ} \mathrm{C}$ |
| Hand soldering | $350^{\circ} \mathrm{C}$ for 3 seconds |
| Wave or bath soldering | $225^{\circ} \mathrm{C}$ for 5 seconds |
| Cleaning | Use solvents compatible with ABS. |

Ordering code: see next page.

## D6 Key Switch



## PCB layout



PCB layout example showing D6 at minimum center spacing of 12.7 mm ( 0.5 inch)


Schematic of an $X, Y$ coding using strapped terminals and a single sides PCB

${ }^{1}$ ) Note: Switch styles F and L only available in black.

| Ordering code for D6 button: Snap-on buttons for switch style C (square, supplied in bulk) |  | Example: | 1 | 2 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | BTN | D6 | 30 |
| 1 | Button: BTN |  |  | $\rightarrow \quad \uparrow$ |  | 4 |
| 2 | Type: D6 |  |  |  |  |
| 3 | Button color: <br> $00=$ white, $10=$ grey, $30=$ yellow, $40=$ red, $50=$ green, $60=$ blue, $80=$ ivory, $90=$ black |  |  |  |  |  |

