## Jumper Switch ${ }^{\text {TM }}$

A switchable jumper on $0.1^{\prime \prime}$ pitch that securely switches PCB track signals with a positive contact action.
Supplied in units of 1 thru 16 poles they provide an alternative to jumpers without the need for 'parking pins' on the PCB or exposed bare pins and are available with ON/OFF (JSA4), CHANGEOVER (JSC4), and CENTRE-OFF (JSK9) switch actions. All contacts can be supplied in ganged pairs. (See ordering code).
Longer units (up to 16 poles) save loading time on production. On development they can be cut with a modelling knife to achieve any combination required to provide flexible switching with the least routing on a PCB.
Options available include 2 pole ganged style, sliders of different colours in the EIA range and a mixture of colours for sliders in multiple way versions and slider numbering.
Reliable switching of the gold over nickel plated phosphor bronze contacts is assured with the 4 point wiping contact design. The contacts never rub over any plastic part and every one is tested before despatch. The positive detent action ensures good shock resistance and the deep ' V ' slots securely locate any operating probe.
Jumper-Switch has been designed for use on hand or flow soldered and washed PCBs. The tight pin fit prevents any wicking. Users should evaluate that their particular processes are compatible with the unsealed contact design concept.

## Key Features:

- Drop in replacement for jumpers.
- Secured in the ON or OFF setting.
- 0.1 " mounting pitch.
- 1 thru 16 ON/OFF, CHANGEOVER and CENTRE-OFF contacts.
- Ganged pairs of contacts option.
- Hard gold plated wiping contacts.
- If you have a volume requirement for a product variant not shown on this sheet please contact us.



## Principal Electrical and Performance Data (at 20 ${ }^{\circ} \mathrm{C} \mathbf{7 0 \%}$ R.H.):

- Contact Ratings: Non Switching: 100Vac, 5A
- Switching: $1 \mu \mathrm{~V}$ to $100 \mathrm{~V}, 1 \mu \mathrm{~A}$ to 1 A 10VA.
- Initial Contact Resistance: (at $10 \mathrm{mV}, 10 \mathrm{~mA}$ max.) Typical: $10 \mathrm{~m} \Omega$. Max. $15 \mathrm{~m} \Omega$.
- Insulation Resistance: (at 500 Vdc min.) $10,000 \mathrm{M} \Omega$.
- Life: Minimum 1,000 operations.
- Dielectric Strength: 1 minute: 500 Vrms 50 Hz .
- Capacitance Between Open Contacts: < 5pf at 1 KHz .
- Temperature: Operating range for continuous electrical use and manual operation is restricted to $-55^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ for standard products.
- Operating Force per pole: Max. 5 N .
- Humidity: BS 2011 Test Ca: 56 days
- Solderability: < 2 seconds to wet at $235^{\circ} \mathrm{C}$ as per IEC 68 and BS 2011
Test T , solder bath method.
Resistance to soldering heat as per IEC 68 and BS 201110 seconds satisfactory at $260^{\circ} \mathrm{C}$ when mounted on 1.5 mrn PCB.
- Materials:

Slider - GF PBT UL94-V0
Switch Body - PA/PTFE lubricated -UL94-VO
Contact (moving) - CuSnP plated AuCo over $2.5 \mu \mathrm{Ni}$
Contact (fixed) - CuZn plated AuCo over $2.5 \mu \mathrm{Ni}$
Please note: BS 2011 is now superseded by BS EN 60068.



End View


Changeover Ganged JSC4-x


