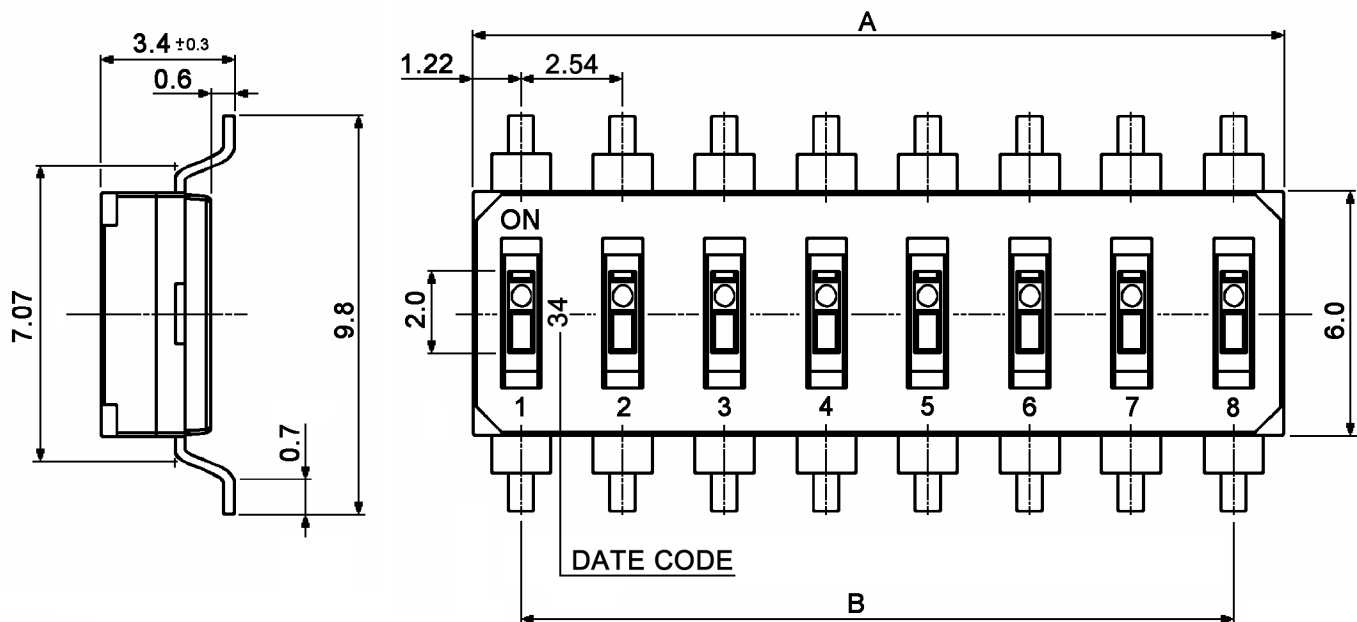
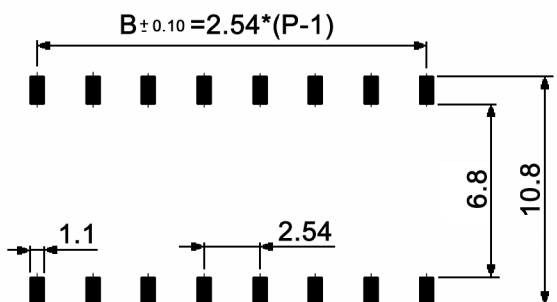
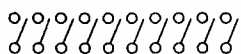




#### P.C.B. LAYOUT



#### SCHEMATIC (TYP.)



(1,2,3,4,5,6,7,8,9,10,12, POS AVAIL)

| Prod. No.   | No. of pos. | A     | B     |
|-------------|-------------|-------|-------|
| SBS 5001 TG | 1           | 2.44  | -     |
| SBS 5002 TG | 2           | 4.98  | 2.54  |
| SBS 5003 TG | 3           | 7.52  | 5.08  |
| SBS 5004 TG | 4           | 10.06 | 7.62  |
| SBS 5005 TG | 5           | 12.60 | 10.16 |
| SBS 5006 TG | 6           | 15.14 | 12.70 |
| SBS 5007 TG | 7           | 17.68 | 15.24 |
| SBS 5008 TG | 8           | 20.22 | 17.78 |
| SBS 5009 TG | 9           | 22.76 | 20.32 |
| SBS 5010 TG | 10          | 25.30 | 22.86 |
| SBS 5012 TG | 12          | 30.38 | 27.94 |

Compliance: RohS II (2011/65/EU)

|                         |       |      |       |      |             |      |
|-------------------------|-------|------|-------|------|-------------|------|
| Tolerances: max. ±0.2mm |       |      | Date  | Name | SBS 5000 TG |      |
|                         |       |      | 07/10 | dr   |             |      |
|                         |       |      |       |      |             |      |
|                         |       |      |       |      |             |      |
| Material                | 10/16 | dr   |       |      | 30 21 46    |      |
| Sealing                 | 11/13 | dr   |       |      |             |      |
| Soldering conditions    | 03/13 | dr   |       |      |             |      |
| Specifications          | 05/11 | dr   |       |      |             |      |
| Modifications           | Date  | Name |       |      |             | Page |
|                         |       |      |       |      |             | 1/2  |

knitter-switch

|                        |                                                                                                                                                                                                                                                                                                                                 |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contact rating:        | non-switching: 100mA, 50V DC<br>switching: 25mA, 24V DC<br>min.: 20mV AC/DC at 1μA                                                                                                                                                                                                                                              |
| Contact resistance:    | 100mOhm max.                                                                                                                                                                                                                                                                                                                    |
| Insulation resistance: | 100MOhm min. at 500V DC for 1 minute +/-5sec.                                                                                                                                                                                                                                                                                   |
| Dielectric strength:   | 500V AC (50/60Hz) for 1 minute                                                                                                                                                                                                                                                                                                  |
| Shock resistance:      | MIL STD 202F, method 213B, cond. A,<br>contact interruption <10μsec.                                                                                                                                                                                                                                                            |
| Vibration resistance:  | MIL STD 202F, method 204, cond. C,<br>contact interruption <10μsec.                                                                                                                                                                                                                                                             |
| Operating temperature: | -40°C to +85°C                                                                                                                                                                                                                                                                                                                  |
| Storage temperature:   | -40°C to +85°C                                                                                                                                                                                                                                                                                                                  |
| Mechanical life:       | 5 000 cycles                                                                                                                                                                                                                                                                                                                    |
| Operating force:       | 1 000gf max.                                                                                                                                                                                                                                                                                                                    |
| Sealing:               | by protective tape, washable by aqueous detergents and isopropyl alcohol                                                                                                                                                                                                                                                        |
| Material:              | Cover / base: high-temp. thermoplastic PA-9T UL94V-0, molded black,<br>Genestar GN2332, UL-file E90350<br>Contact: copper, 0.3μm gold plated over 0.5μm nickel<br>Terminal: brass, 0.3μm gold plated over 0.5μm nickel<br>Actuator: thermoplastic LCP UL94V-0, molded white,<br>Sumitomo E6006L, UL-file E54705<br>Tape: kapton |

IR-reflow soldering

Temperature ( $^{\circ}\text{C}$ )

Time (sec.)

Key parameters and limits:

- $T_P = 260^{\circ}\text{C}$
- $t_P = 10\text{sec. max.}$
- $T_L = 217^{\circ}\text{C}$
- $t_L = 90\text{sec. max.}$
- $T_{S\text{ max}} = 200^{\circ}\text{C}$
- $T_{S\text{ min}} = 150^{\circ}\text{C}$
- $t_S = 120\text{sec. max.}$
- Max. ramp up rate =  $3^{\circ}\text{C/sec.}$
- Max. ramp down rate =  $6^{\circ}\text{C/sec.}$
- Time  $25^{\circ}\text{C}$  to peak

|                         |      |      |                |      |             |      |
|-------------------------|------|------|----------------|------|-------------|------|
| Tolerances: max. ±0.2mm |      |      | Date           | Name | SBS 5000 TG |      |
|                         |      |      | 07/10          | dr   |             |      |
|                         |      |      |                |      |             |      |
|                         |      |      |                |      |             |      |
|                         |      |      |                |      |             |      |
|                         |      |      |                |      |             |      |
|                         |      |      | knitter-switch |      | 30 21 46    | Page |
|                         |      |      |                |      |             |      |
|                         |      |      |                |      |             |      |
|                         |      |      |                |      |             |      |
| Modifications           | Date | Name |                |      |             | 2/2  |