

Features/Benefits

- Excellent tactile feel
- Plunger can be custom designed
- SMT switch adapted for low current
- Only actuate 1 direction at a time
- Provides logic level control

Typical Applications

- Seat adjustments
- Industrial controls
- Mirror adjustment
- Home entertainment
- Multi-function steering wheel



Construction

FUNCTION:	QSA2: 2 way switch QSA4: 4 way switch
TYPE OF SWITCH:	QSA2: 2x make contacts QSA4: 4x make contacts
FOOTPRINT:	23 mm x 18 mm, operating direction diagonal
HEIGHT:	Housing: 9 mm, total height: 22,4 mm
PINS:	Solder pins, SMD
ATTACHMENT:	Snap-in pegs provided to help secure and locate switches
ACTUATOR:	ø3,5 mm with button fastener

Mechanical

OPERATION DIRECTION:	In X-Y direction along the diagonal axis of the switch. Rotation point is 5,5 mm over the PCB surface.
TRAVEL:	Travel of the actuator measured on an axis parallel to and 19 mm above PCB. switch point/stop (4,0 N force) 1,5 ± 0,4 mm / 2,0±0,3 mm
ACTUATION ANGLE:	G8 version To switch point / stop (4,0 N force) 6,5° / 8,5°
ACTUATION FORCE:	3,5 ± 1 N
TACTILE EFFECT:	≥ 15%
LIFE:	100,000 cycles in each direction (≤ 20 N force)

Mechanical (continued)

RETURN FORCE:	0,8 ± 0,3N
ACTUATION STRENGTH:	>50 N, parallel to PCB >100 N, vertical (push) to PCB >50 N traction (pull) force

Electrical

SWITCHING POWER MAX:	0,20 VA
MIN / MAX SWITCHING VOLTAGE:	(VDC) 20mV / 30 V
MIN / MAX SWITCHING CURRENT:	1mA / 50mA
BOUNCE:	< 1 ms

Environmental

OPERATING TEMPERATURE:	-40°C to 85°C
STORAGE TEMPERATURE:	-40°C to 95°C

Process

AUTOMATIC SOLDERING: Reflow compatible per CECC00802

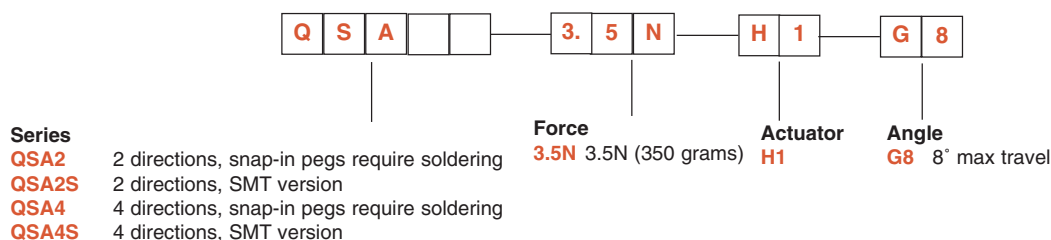
Other Data

CONTACT MATERIAL:	Au on Ni layer
SOLDERING PINS:	Au flash
HOUSING MATERIAL:	Thermoplastic

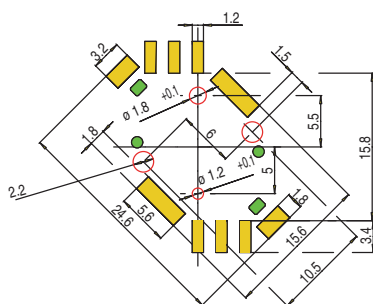
NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

How To Order

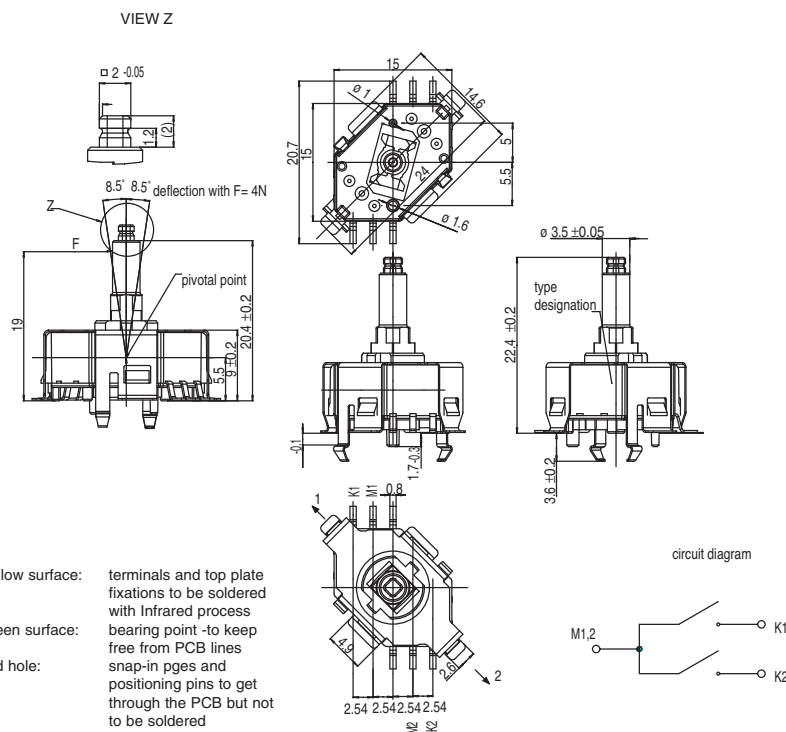
Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box.



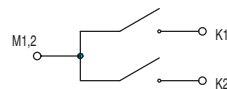
QSA2S H1



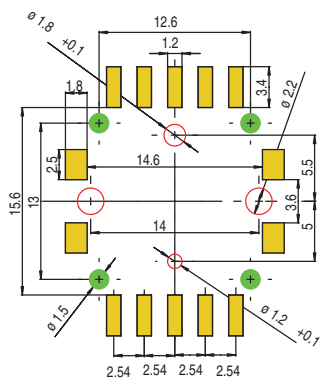
yellow surface:	terminals and top plate fixations to be soldered with Infrared process
green surface:	bearing point -to keep free from PCB lines
red hole:	snap-in pges and positioning pins to get through the PCB but not to be soldered



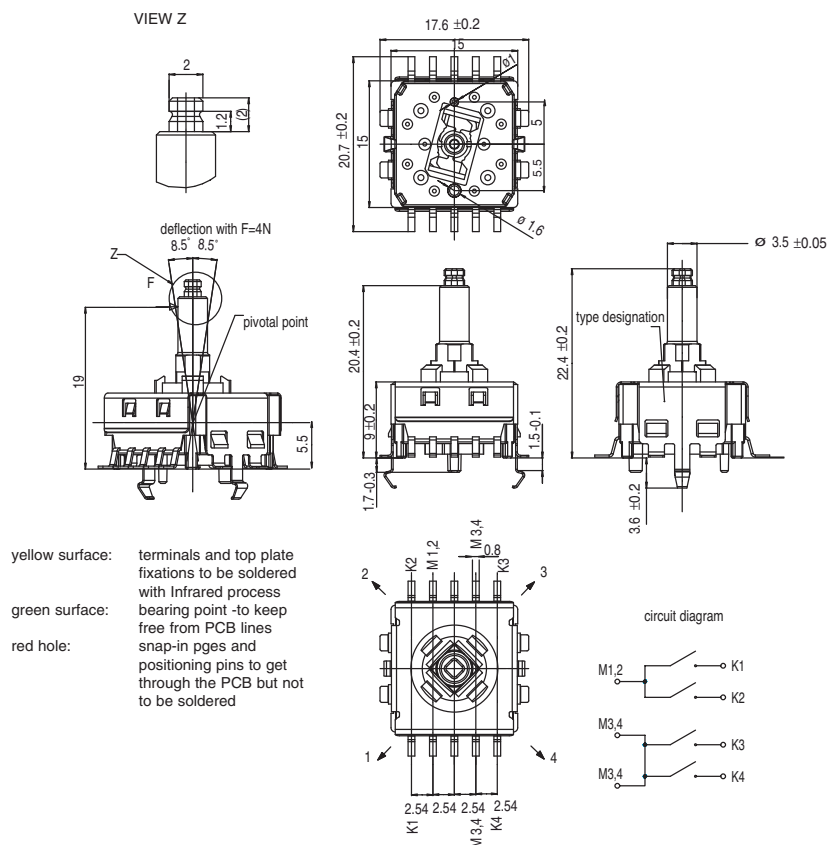
circuit diagram



QSA4S H1



yellow surface:	terminals and top plate fixations to be soldered with Infrared process
green surface:	bearing point -to keep free from PCB lines
red hole:	snap-in pges and positioning pins to get through the PCB but not to be soldered



Dimensions are shown: mm (inch)
Dimensions subject to change