

QSA Series Silent Navigation Switch for SMT

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
- RoHS compliant

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 (H1 version)
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: (H1 G8 version)	Travel of the actuator measured on an axis parallel to and 19 mm above PCB. switch point/stop (4,0 N force) 1,2 ± 0,4 mm / 1,9±0,5 mm
ACTUATION ANGLE:	G8 version To switch point / stop (4,0 N force) 6.5° / 8.5°
ACTUATION FORCE:	3,3 ± 1 N
TACTILE EFFECT:	15%
LIFE:	30,000 cycles in each direction (≤ 20 N force)

For further information and test reports concerning life, please consult factory.

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

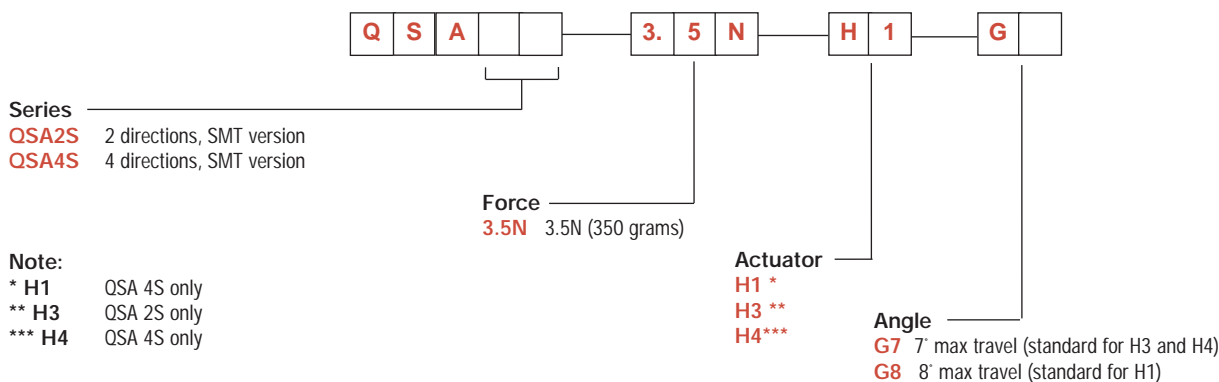
CONTACT MATERIAL: Au on Ni layer
SOLDERING PINS: Au flash
HOUSING MATERIAL: Thermoplastic

QSA is RoHS compliant.

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

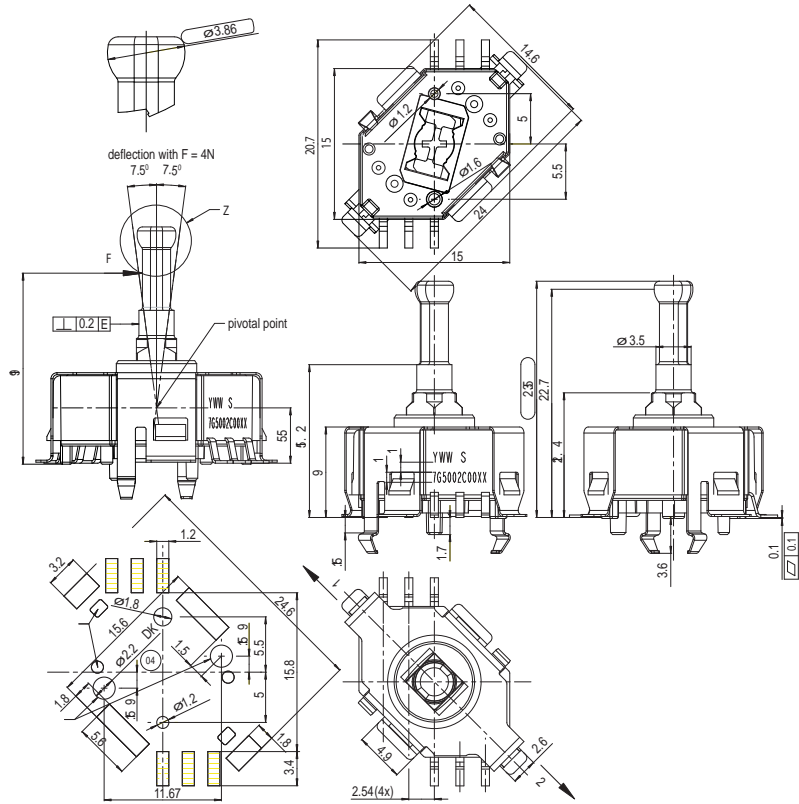
How To Order

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.



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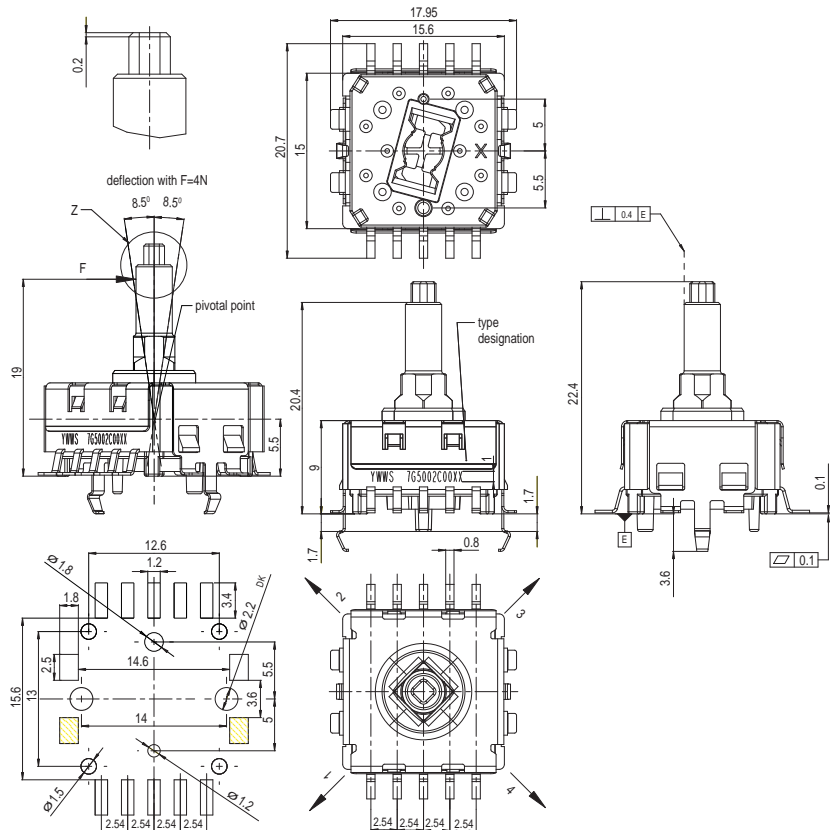
QSA2S H3



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

Navigation

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 snap-in pegs and positioning pins to get through the PCB but not to be soldered
- red hole:**

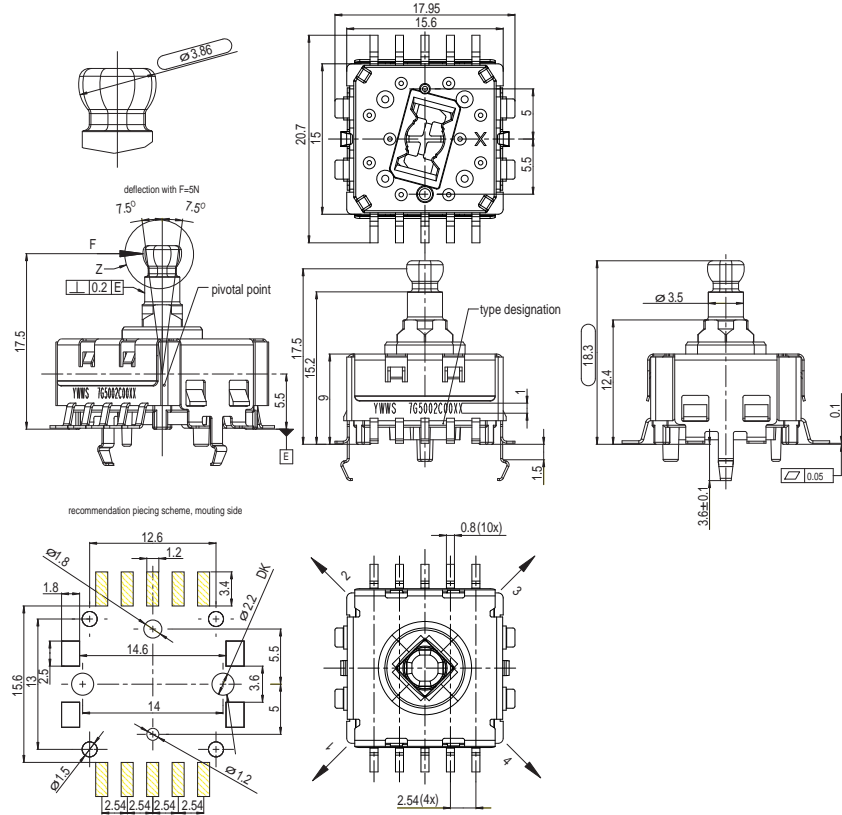


Dimensions are shown: mm (inch)
Specifications and dimensions subject to change



QSA Series Silent Navigation Switch for SMT

OSA4S H4



Navigation