

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) 1,5 ± 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

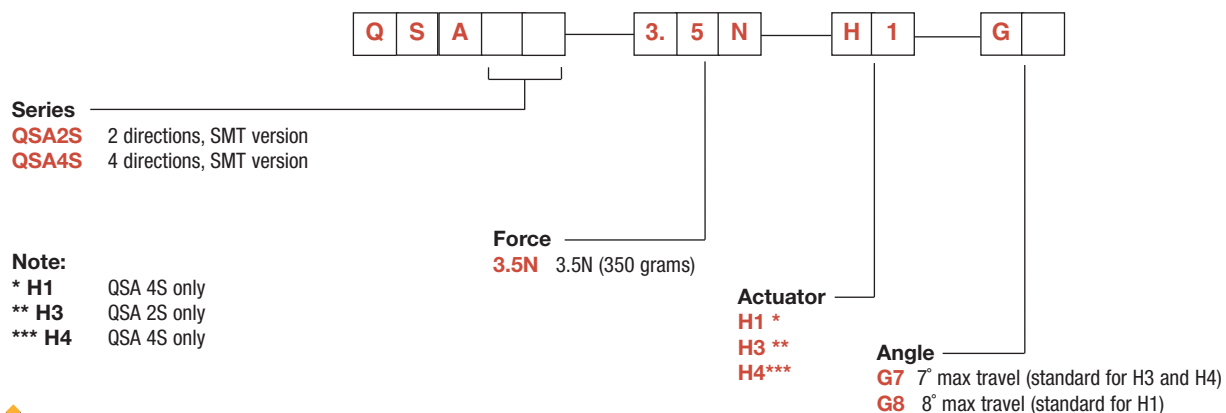
NOTE: For the latest information regarding RoHS compliance, please go to: www.ittcannon.com/rohs.

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

Note: Product to be offered as compatible with the lead free soldering profile on Q3-2006.

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.



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

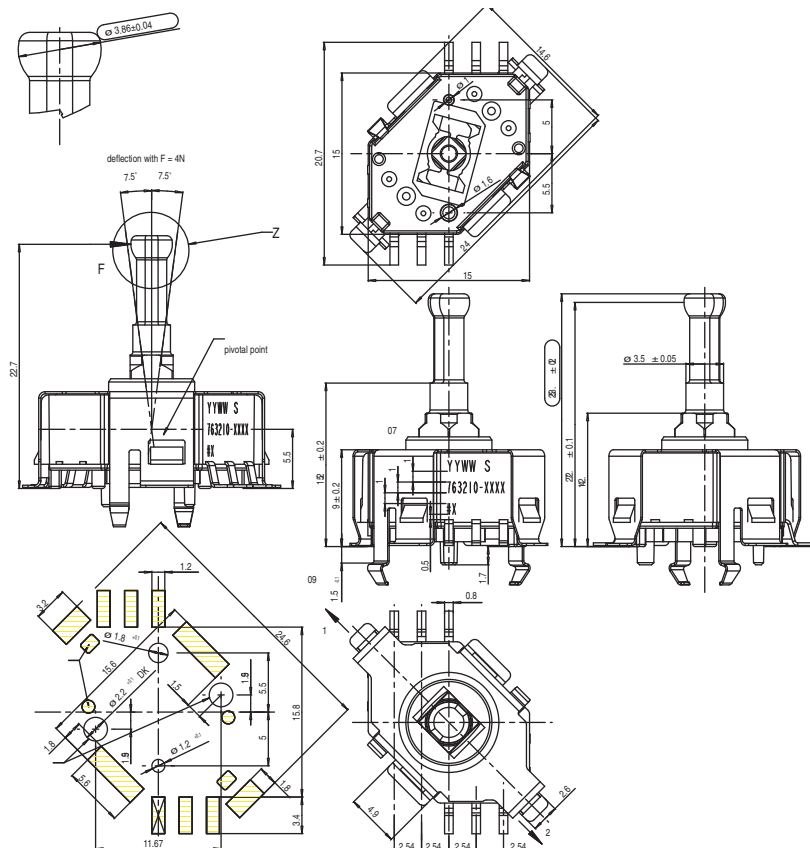
www.ittcannon.com



Navigation

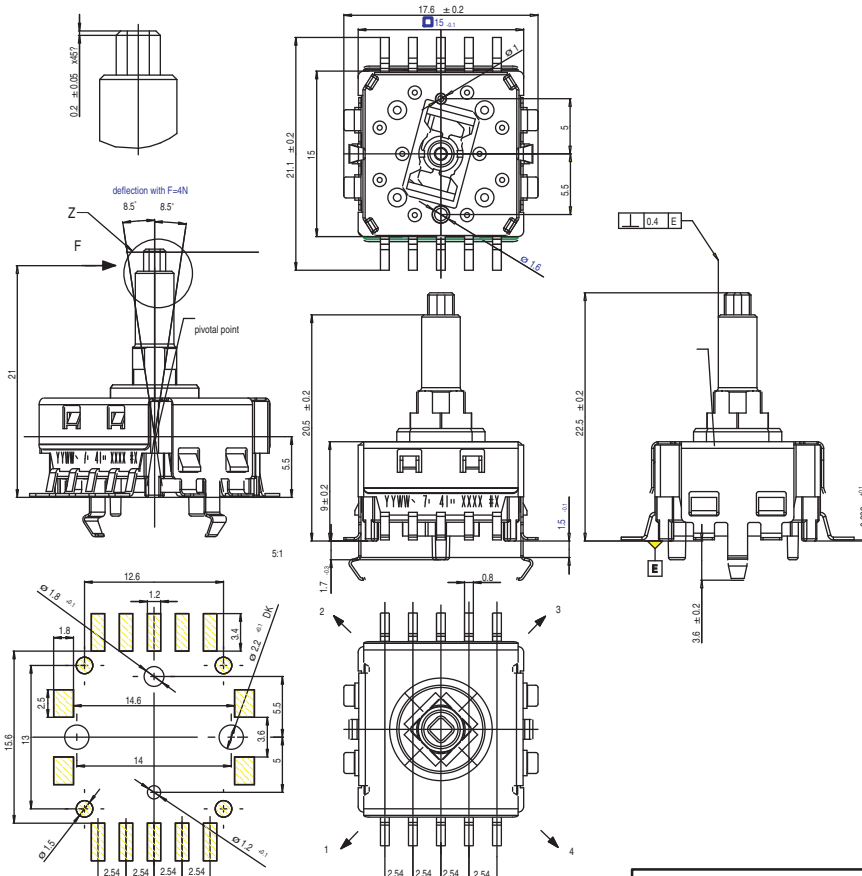
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QSA2S H3



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

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 pegs and positioning pins to get through the PCB but not to be soldered

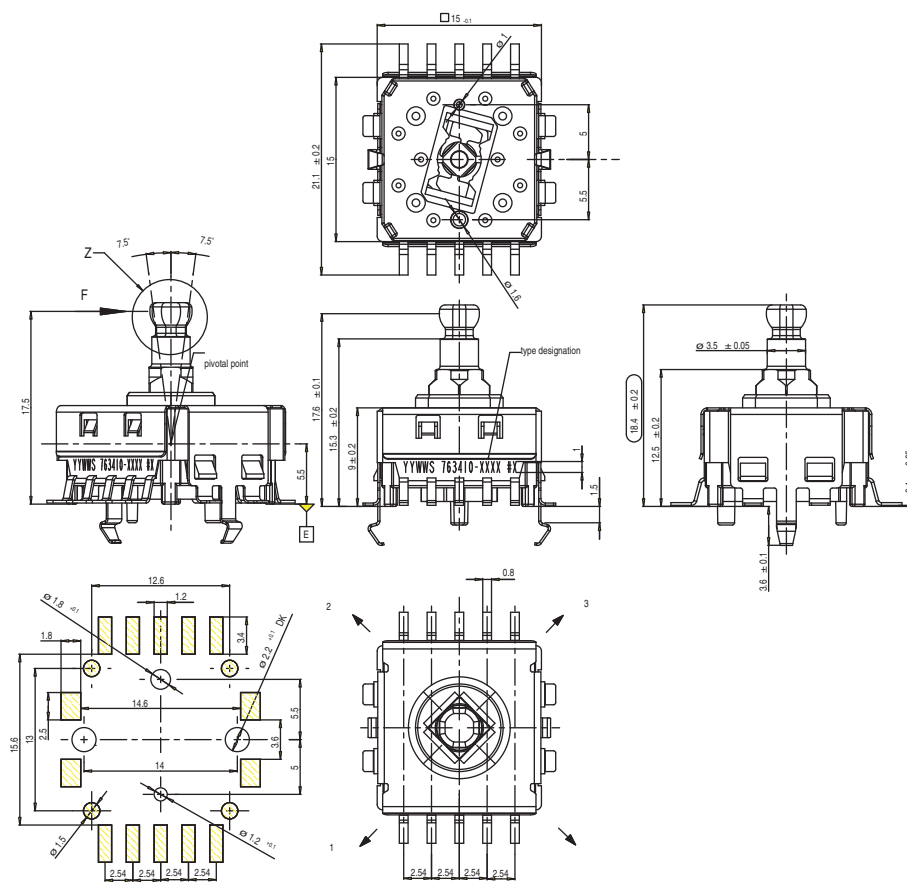


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QSA4S H4



Navigation