

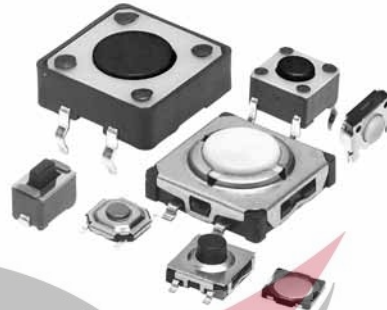
**Product Range**

**Tactile Switches**

- 3,5 x 6 mm FSM Standard Size Tactiles
- 6 x 6 mm FSM Standard Size Tactiles
- 6 x 6 mm FSM Low Profile Tactiles
- 12 x 12 mm FSM Standard Tactiles
- FSM Slimline Tactiles
- FSM Miniature Side Actuated Tactiles
- FSM Multidirectional Tactiles

**Main features:**

- Different actuator length and styles
- Different actuation forces
- Sealed, unsealed, radial tape versions
- Ultra low profile versions
- Right angle versions
- SMT and THT versions
- High temperature versions
- Extended life versions



Tactile Switches



**FSM . SM & FSM . JM Series 3.5 x 6.0, THT & SMT .....page C4**



**FSM . SMS & FSM . JMS Series 4.6 x 6.8, Sealed, THT & SMT .....page C6**



**FSM . SMLP & FSM . JMLP Series, 4.2 x 6.0, Low profile, SMT .....page C8**



**FSMJ Series 6 x 6, THT .....page C10**



**FSMCD Series 6 x 6, Square Button, THT .....page C13**



**FSMJRT Series 6 x 6, Radial Tape, THT .....page C15**

**Product Range** (Continued)



**FSMRAJ Series 6 x 6, Right Angle, THT** .....page C17



**FSMJSM Series 6 x 6, SMT** .....page C19



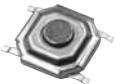
**FSMLP Series 6 x 6, Low Profile, SMT** .....page C21



**FSMJEL Series 6 x 6, Extended Life, SMT** .....page C23



**FSMJX Series 6 x 6, Extreme Life Cycle, SMT** .....page C25



**FSMCT Series 5.2 x 5.2, Ultra Low Profile, SMT** .....page C26



**FSMLPU Series 4.8 x 4.8, Slimline, SMT** .....page C27



**FSMJS6 Series 6 x 6, Sealed, SMT** .....page C28



**FSMJS Series 7.6 x 7.3, Sealed, SMT & THT** .....page C29



**Product Range** (Continued)



**FSMRAJS Series 6 x 6, Sealed, Right Angle, SMT & THT** .....page C32



**FSMRAJSA Series 8.1 x 8.1, Sealed, Right Angle, SMT** .....page C34



**FSM10 Series 12 x 12, THT** .....page C36



**FSM10 Series 12 x 12, Sealed, SMT & THT** .....page C38



**FSMMSH Series 2.55 x 4.5, Miniature Side Action, SMT** .....page C41



**FSMMS Series 3 x 5 Miniature Side Action, SMT** .....page C43



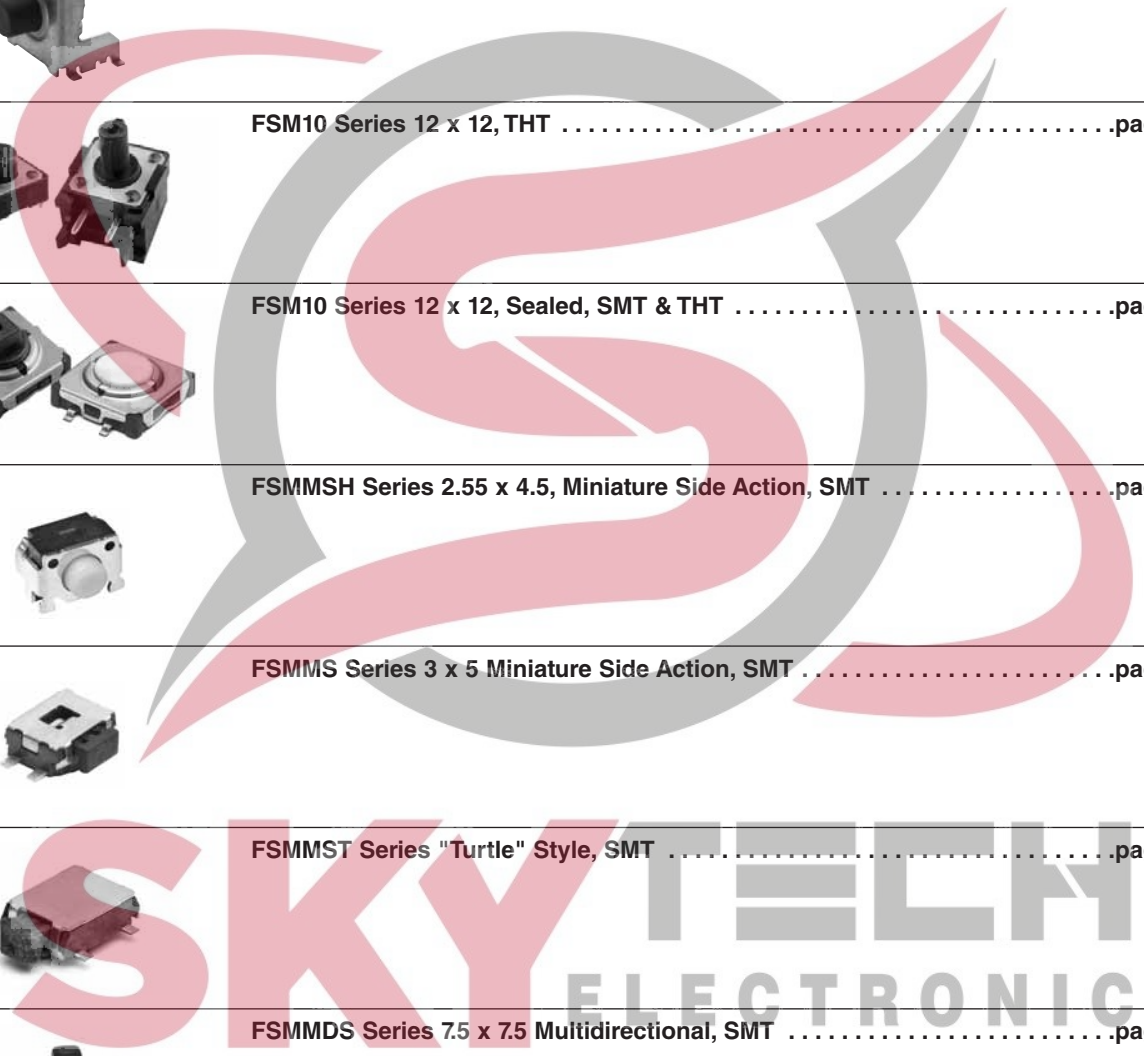
**FSMMST Series "Turtle" Style, SMT** .....page C45



**FSMMDS Series 7.5 x 7.5 Multidirectional, SMT** .....page C47



**FSM . MD Series 12 x 12 Multidirectional, THT & SMT** .....page C49



**FSM . SM & FSM . JM Series 3.5 x 6.0, THT & SMT**

**Features**

- 3 mounting options
- Space saving geometry



Tactile Switches

**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	max 50 mA @ 24 VDC
Contact rating min.	min 10 µA @ 1 VDC
Electrical life	20,000 to 40,000 cycles
Mechanical life	20,000 to 40,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.3 N (130 gf) to 1.8 N (180 gf)
Actuator travel	0.25 mm (.010) average

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	265°C/10sec wave or 260°C/10s reflow

**Material specifications**

Contacts	stainless steel silver finish
Actuator	pps, nylon or pbt
Terminals	copper alloy silver or tin finish
Base	pps or nylon
Cover	stainless steel
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM**

**1**

**SM**

**TR**

**Type**

**FSM** Tactile switch 3.5 x 5 mm

**Actuator length**

<b>1</b>	4.3 mm (.169)
<b>2</b>	5.0 mm (.197)

**Terminal**

<b>blank</b>	through hole - THT
<b>SM</b>	surface mount - SMT
<b>JM</b>	J-lead surface mount - SMT

**Actuation force**

<b>blank</b>	1.8±0.5 N (180±50 gf)
<b>L</b>	1.3±0.5 N (130±50 gf)

**Finish**

<b>blank</b>	silver
<b>SN</b>	tin

**Packaging**

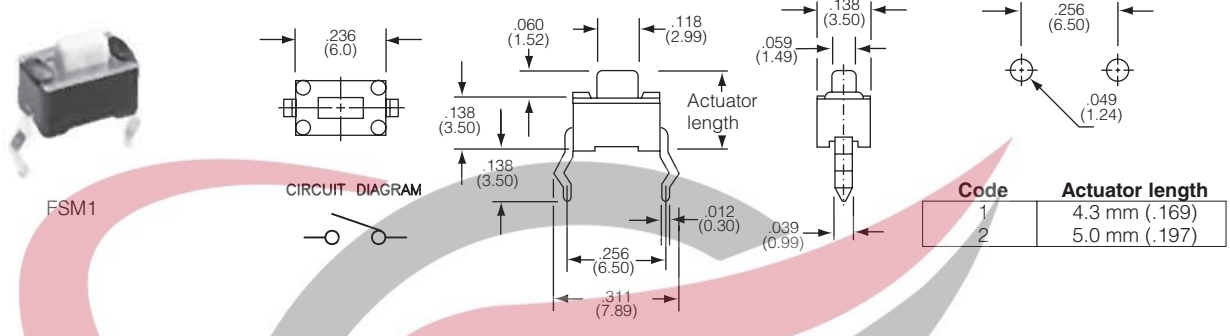
<b>blank</b>	bulk
<b>TR</b>	tape & reel

**FSM . SM & FSM . JM Series 3.5 x 6.0, THT & SMT (Continued)**

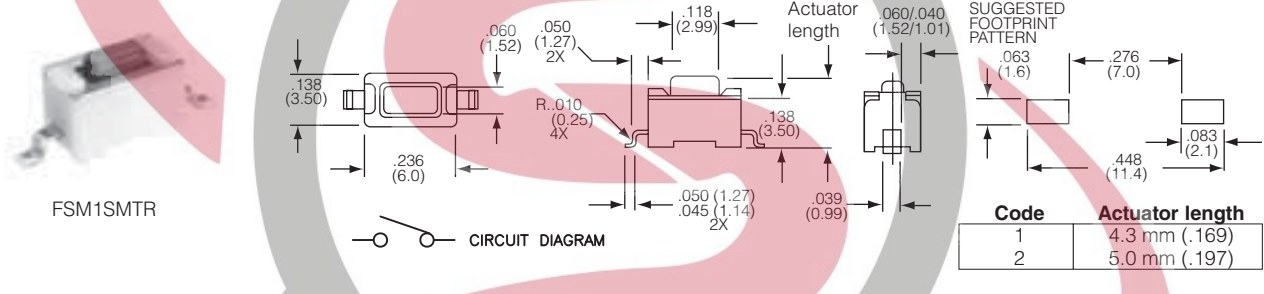
**Terminal**



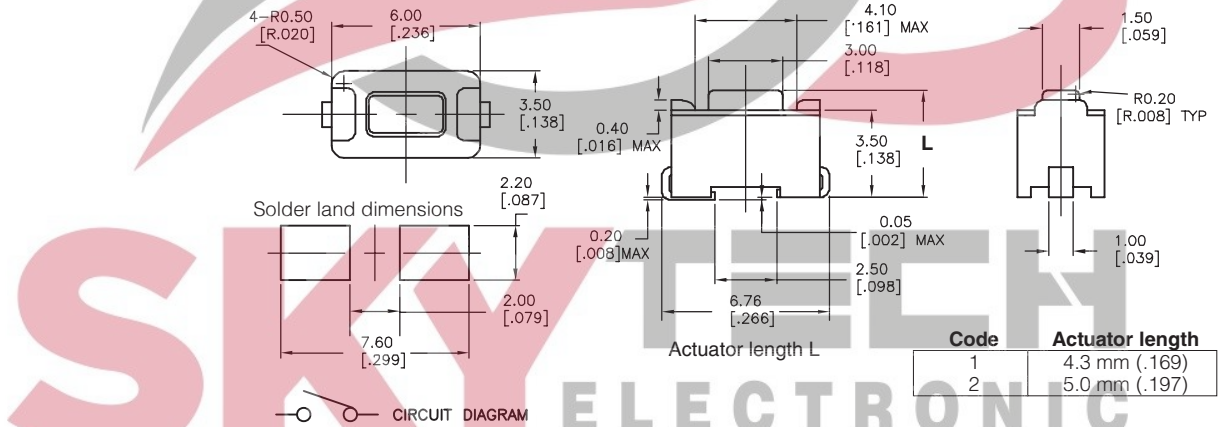
**blank through hole technology**



**SM surface mount SMT**



**JM J-lead surface mount - SMT**



Product key	Actuator length	Life	Terminal	Actuation force	Finish	Packaging	Part Number
FSM1JML	4.3 mm	40,000	J-lead, SMT	1.8±0.5 N (180±50 gf)	Silver	bulk	147942-1
FSM1JMLTR	(.169)			1.3±0.5 N (130±50 gf)		tape & reel	147942-2
FSM1JMSNTR				1.8±0.5 N (180±50 gf)	Tin		147873-5
<b>FSM1JMTR</b>					Silver		<b>147873-2</b>
<b>FSM1L</b>		20,000	THT	1.3±0.5 N (130±50 gf)		bulk	<b>1825966-1</b>
<b>FSM1SM</b>			SMT	1.8±0.5 N (180±50 gf)			<b>1437566-3</b>
<b>FSM1SMTR</b>						tape & reel	<b>1437566-4</b>
FSM2JMSNTR	5.0 mm	40,000	J-lead, SMT		Tin		147873-4
<b>FSM2JMTR</b>	(.196)				Silver		<b>147873-1</b>
<b>FSM2L</b>		20,000	THT	1.3±0.5 N (130±50 gf)		bulk	<b>1825965-1</b>

Preferred parts in bold print

**FSM . SMS & FSM . JMS Series 4.6 x 6.8, Sealed, THT & SMT**

**Features**

- 3 mounting options
- Space saving geometry
- Sealed per IP67



Tactile Switches

**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	max 50 mA @ 24 VDC
Contact rating min.	min 10 $\mu$ A @ 1 VDC
Electrical life	1,000,000 cycles
Mechanical life	1,000,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 mOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.3 +/-0.5 N (130 +/-50 gf)
Actuator travel	0.35 mm (.014) average

**Environmental specification**

Operating temperature	-35 to +105°C in testing
Storage temperature	-35 to +105°C in testing
Solder heat resistance	265°C/10sec wave or 260°C/10s reflow
Seal	IP67

**Material specifications**

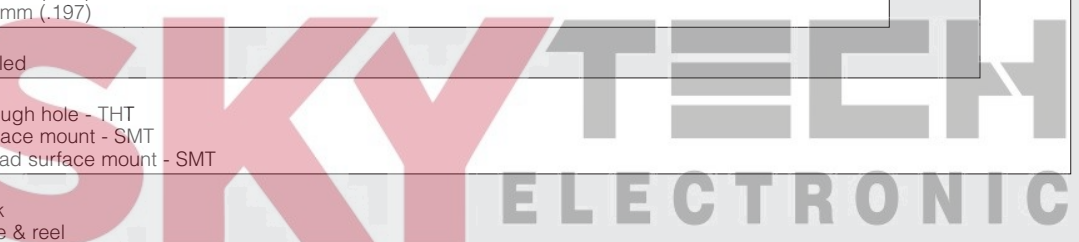
Contacts	stainless steel silver finish
Actuator	nylon
Terminals	copper alloy silver finish
Base	nylon
Cover	nickel silver
Seal	silicon rubber
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM 1 S JM**

<b>Type</b>	<b>FSM</b> Sealed tactile switch 4.6 x 6.8 mm, THT & SMD
<b>Actuator length</b>	<b>1</b> 4.3 mm (.169) <b>2</b> 5.0 mm (.197)
<b>Version</b>	<b>S</b> sealed
<b>Terminal</b>	<b>blank</b> through hole - THT <b>SM</b> surface mount - SMT <b>JM</b> J-lead surface mount - SMT
<b>Packaging</b>	<b>blank</b> bulk <b>TR</b> tape & reel



**FSM . SMS & FSM . JMS Series 4.6 x 6.8, Sealed, THT & SMT (Continued)**

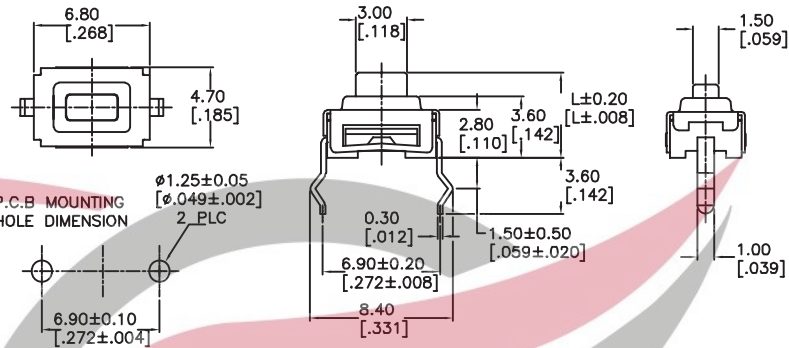
**Terminal**



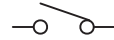
**blank through hole - THT**



FSM2S



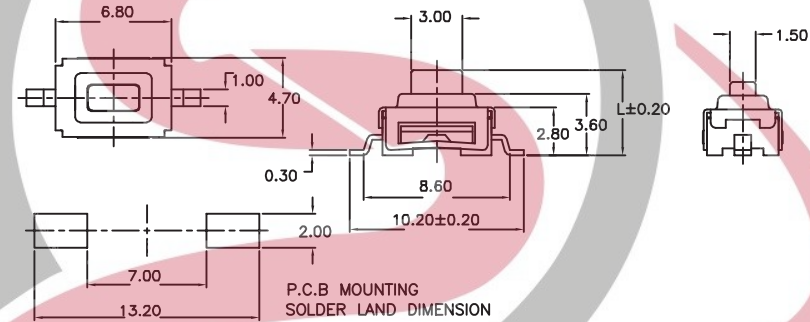
CIRCUIT DIAGRAM



**SM surface mount - SMT**



FSM2SSM



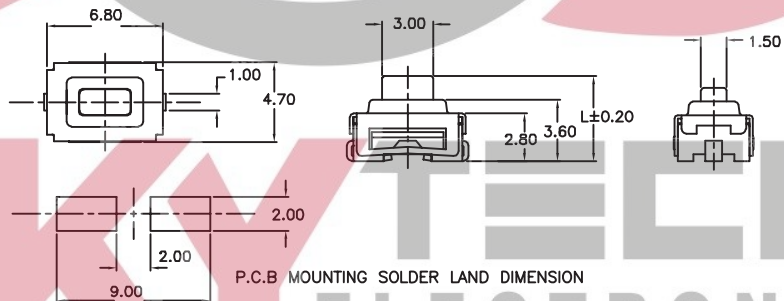
CIRCUIT DIAGRAM



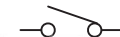
**JM J-lead surface mount - SMT**



FSM2SJM



CIRCUIT DIAGRAM



Product key	Actuator length	Version	Terminal	Packaging	Part Number
FSM1SJM	4.3 mm	sealed	J-lead, SMT	bulk	1571299-1
<b>FSM1SJMTR</b>				tape & reel	<b>1571299-2</b>
FSM2S	5.0 mm		THT	bulk	1571297-1
FSM2SJM			J-lead, SMT		1571299-3
<b>FSM2SJMTR</b>				tape & reel	<b>1571299-4</b>
FSM2SSM			SMT	bulk	1571298-1
<b>FSM2SSMTR</b>				tape & reel	<b>1571298-2</b>

Preferred parts in bold print

**FSM . SMLP & FSM . JMLP Series, 4.2 x 6.0, Low profile, SMT**

**Features**

- 2 mounting options
- Space saving geometry
- Low profile



Tactile Switches

**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 32VDC
Contact rating min.	20 $\mu$ A @ 1 VDC
Electrical life	100,000 cycles
Mechanical life	100,000 cycles
Contact resistance	max. 100mOhm
Capacitance	min. 100MOhm
Insulation resistance	250 VAC for 1 min
Actuation force	1.6 N to 5.2 N (160 to 520 gf)
Actuator travel	0.50 mm (.020) average

**Environmental specification**

Operating temperature	-40 to +85°C
Storage temperature	-40 to +100°C
Solder heat resistance	260°C/10s reflow

**Material specifications**

Contacts	stainless steel silver finish
Actuator	silicon rubber
Terminals	copper alloy silver finish
Base	nylon
Cover	stainless steel
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM** **JM** **LP** **A** **TR**

**Type**

**FSM** Low profile tactile switch 4.2 x 6.0 mm

**Terminal**

**JM** J-lead surface mount - SMT      **SM** surface mount - SMT

**Version**

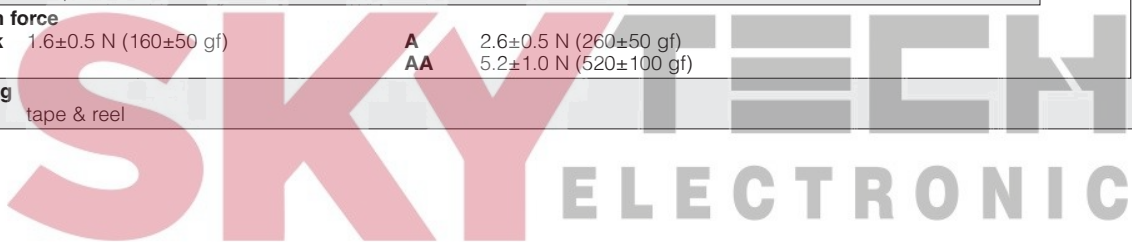
**LP** low profile version

**Actuation force**

**blank** 1.6±0.5 N (160±50 gf)      **A** 2.6±0.5 N (260±50 gf)  
**AA** 5.2±1.0 N (520±100 gf)

**Packaging**

**TR** tape & reel





**FSM . SMLP & FSM . JMLP Series, 4.2 x 6.0, Low profile, SMT (Continued)**

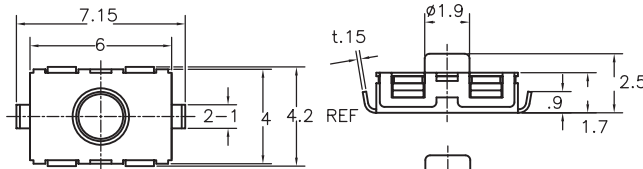
**Terminal**



**JM J-lead surface mount**



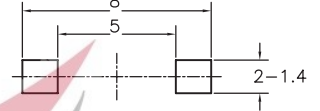
FSMJMPTR



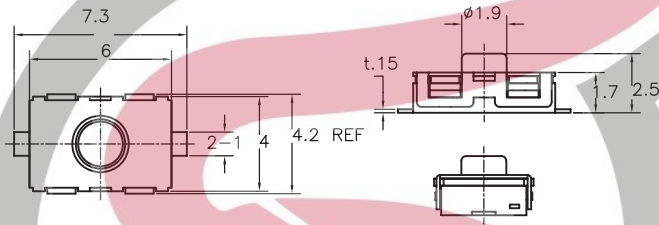
CIRCUIT DIAGRAM



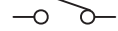
P.C.B SOLDER LAND DIMENSION



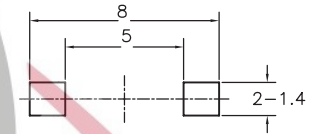
**SM surface mount**



CIRCUIT DIAGRAM



P.C.B SOLDER LAND DIMENSION



Product key	Terminal	Actuation force	Packaging	Part Number
<b>FSMJMLPTR</b>	J-lead, SMT	1.6±.5 N (160±50 gf)	tape & reel	<b>1571528-1</b>
<b>FSMJMLPATR</b>		2.6±.5 N (260±50 gf)		<b>1571528-2</b>
<b>FSMSMLPTR</b>	SMT	1.6±.5 N (160±50 gf)		<b>1825086-1</b>
<b>FSMSMLPATR</b>		2.6±.5 N (260±50 gf)		<b>1825086-2</b>
FSMSMLPAATR		5.2±1.0 N (520±100 gf)		1825086-3

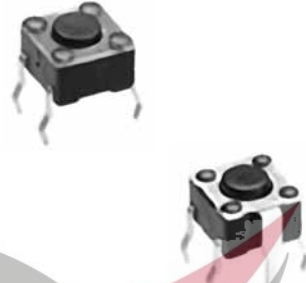
Preferred parts in bold print



**FSMJ Series 6 x 6, THT**

**Features**

- With or without ground terminal
- 9 standard actuator lengths
- 4 different actuation forces



Tactile Switches

**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	max 50 mA @ 24 VDC
Contact rating min.	min 10 $\mu$ A @ 1 VDC
Electrical life	500,000 cycles
Mechanical life	500,000 cycles
Contact resistance	max 50 mOhm
Insulation resistance	min 1,000 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.0 to 5.2 N (100 to 520 gf)
Actuator travel	0.25mm +0.20/-0.10

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	265°C for 10 s

**Material specifications**

Contacts & terminals	copper alloy silver finish
Actuator & base	nylon 66
Cover	PET film or steel
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM 2 J A H**

**Type**

**FSM** Tactile switch 6 x 6 mm

**Grounding terminal & actuator length**

without grounding terminal, actuator length

<b>2</b> 4.3 mm (.169)	<b>8</b> 9.5 mm (.374)	<b>14</b> 13.0 mm (.512)
<b>4</b> 5.0 mm (.196)	<b>10</b> 7.3 mm (.287)	<b>16</b> 17.0 mm (.669)
<b>6</b> 7.0 mm (.276)	<b>12</b> 8.0 mm (.315)	<b>18</b> 8.5 mm (.335)

with grounding terminal, actuator length

<b>1</b> 4.3 mm (.169)	<b>7</b> 9.5 mm (.374)	<b>13</b> 13.0 mm (.512)
<b>3</b> 5.0 mm (.196)	<b>9</b> 7.3 mm (.287)	<b>15</b> 17.0 mm (.669)
<b>5</b> 7.0 mm (.276)	<b>11</b> 8.0 mm (.315)	<b>17</b> 8.5 mm (.335)

**Version**

**J** through hole version

**Actuation force**

<b>L</b> 1.0±0.5 N (100±50 gf)	<b>A</b> 2.6±0.5 N (260±50 gf)
<b>blank</b> 1.6±0.5 N (160±50 gf)	<b>AA</b> 5.2±1.0 N (520±100 gf)

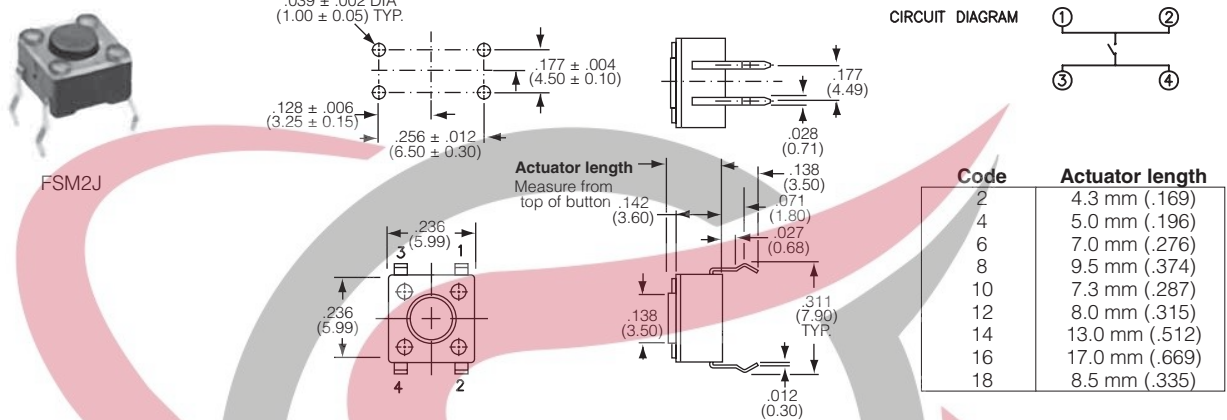
**Temperature**

**H** high temperature version, high solder heat resistance

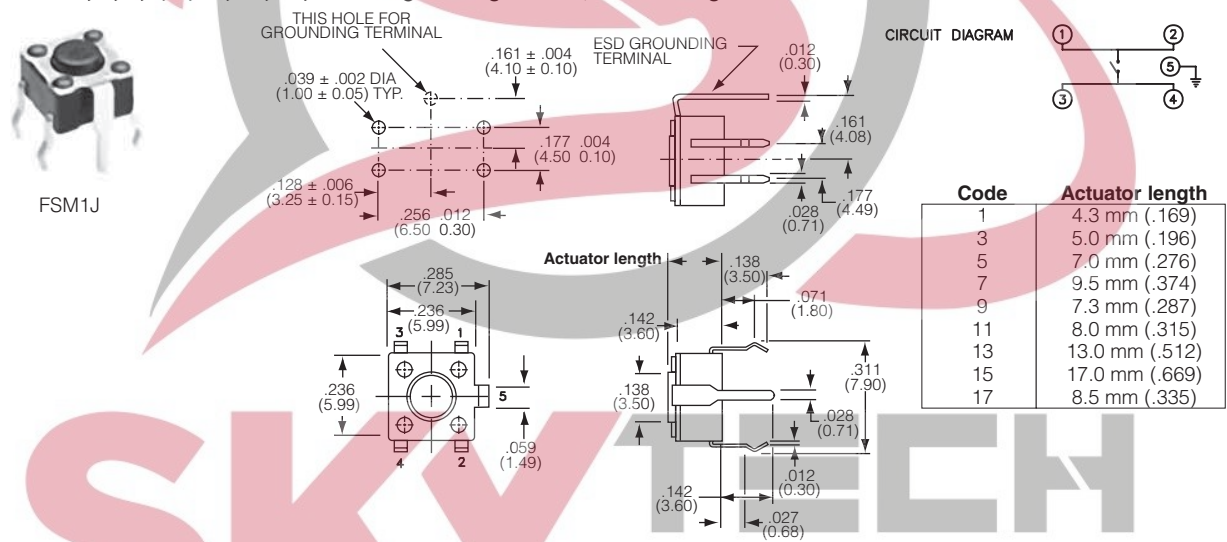
**FSMJ Series 6 x 6, THT (Continued)**

**Grounding terminal & actuator length**

**Codes 2, 4, 6, 8, 10, 12, 14, 16, 18 without grounding terminal, actuator length**



**Codes 1, 3, 5, 7, 9, 11, 13, 15, 17 with grounding terminal, actuator length**



**SKYTECH ELECTRONIC**

Tactile Switches

**FSMJ Series 6 x 6, THT (Continued)**

Tactile Switches

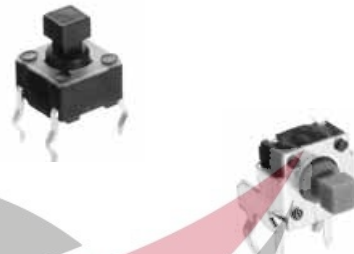
Product key	Grounding	Actuator length	Version	Actuation force	Temperature	Part Number
FSM2JLH	without grounding terminal	4.3 mm (.169)	through hole version	1.0±0.5 N (100±50 gf)	high temperature version	1825910-1
<b>FSM2JH</b>				1.6±0.5 N (160±50 gf)		<b>1825910-2</b>
<b>FSM2JAH</b>				2.6±0.5 N (260±50 gf)		<b>1825910-3</b>
FSM2JAAH				5.2±1.0 N (520±100 gf)	high solder heat resistance	1825910-4
FSM4JLH		5.0 mm (.196)		1.0±0.5 N (100±50 gf)		1825910-5
FSM4JH					1.6±0.5 N (160±50 gf)	1825910-6
FSM4JAH				2.6±0.5 N (260±50 gf)	1825910-7	
FSM4JAAH				5.2±1.0 N (520±100 gf)	1825910-8	
FSM6JLH		7.0 mm (.276)		1.0±0.5 N (100±50 gf)	1825910-9	
FSM6JH					1.6±0.5 N (160±50 gf)	1-1825910-0
FSM6JAH				2.6±0.5 N (260±50 gf)	1-1825910-1	
FSM6JAAH				5.2±1.0 N (520±100 gf)	1-1825910-2	
FSM8JLH		9.5 mm (.374)		1.0±0.5 N (100±50 gf)	1-1825910-3	
FSM8JH					1.6±0.5 N (160±50 gf)	1-1825910-4
FSM8JAH				2.6±0.5 N (260±50 gf)	1-1825910-5	
FSM8JAAH				5.2±1.0 N (520±100 gf)	1-1825910-6	
FSM10JLH		7.3 mm (.287)		1.0±0.5 N (100±50 gf)	1-1825910-7	
FSM10JH					1.6±0.5 N (160±50 gf)	1-1825910-8
FSM10JAH				2.6±0.5 N (260±50 gf)	1-1825910-9	
FSM10JAAH				5.2±1.0 N (520±100 gf)	2-1825910-0	
FSM12JLH		8.0 mm (.315)		1.0±0.5 N (100±50 gf)	2-1825910-1	
FSM12JH					1.6±0.5 N (160±50 gf)	2-1825910-2
FSM12JAH				2.6±0.5 N (260±50 gf)	2-1825910-3	
FSM12JAAH				5.2±1.0 N (520±100 gf)	2-1825910-5	
FSM14JLH		13.0 mm (.512)		1.0±0.5 N (100±50 gf)	2-1825910-6	
FSM14JH					1.6±0.5 N (160±50 gf)	2-1825910-7
FSM14JAH				2.6±0.5 N (260±50 gf)	2-1825910-8	
FSM14JAAH				5.2±1.0 N (520±100 gf)	2-1825910-9	
FSM16JLH		17.0 mm (.669)		1.0±0.5 N (100±50 gf)	3-1825910-0	
FSM16JH					1.6±0.5 N (160±50 gf)	3-1825910-1
FSM16JAH				2.6±0.5 N (260±50 gf)	3-1825910-2	
FSM16JAAH				5.2±1.0 N (520±100 gf)	3-1825910-3	
FSM18JLH		8.5 mm (.335)		1.0±0.5 N (100±50 gf)	3-1825910-4	
FSM18JH					1.6±0.5 N (160±50 gf)	3-1825910-5
FSM18JAH				2.6±0.5 N (260±50 gf)	3-1825910-6	
FSM18JAAH				5.2±1.0 N (520±100 gf)	3-1825910-7	
FSM1JLH	with grounding terminal	4.3 mm (.169)		1.0±0.5 N (100±50 gf)		1825955-1
FSM1JH					1.6±0.5 N (160±50 gf)	
FSM1JAH				2.6±0.5 N (260±50 gf)		1825955-3
FSM1JAAH				5.2±1.0 N (520±100 gf)		1825955-4
FSM3JLH		5.0 mm (.196)		1.0±0.5 N (100±50 gf)		1825955-5
FSM3JH					1.6±0.5 N (160±50 gf)	
FSM3JAH				2.6±0.5 N (260±50 gf)		1825955-7
FSM3JAAH				5.2±1.0 N (520±100 gf)		1825955-8
FSM5JLH		7.0 mm (.276)		1.0±0.5 N (100±50 gf)		1825955-9
FSM5JH					1.6±0.5 N (160±50 gf)	
FSM5JAH				2.6±0.5 N (260±50 gf)		1-1825955-1
FSM5JAAH				5.2±1.0 N (520±100 gf)		1-1825955-2
FSM7JLH		9.5 mm (.374)		1.0±0.5 N (100±50 gf)		1-1825955-3
FSM7JH					1.6±0.5 N (160±50 gf)	
FSM7JAH				2.6±0.5 N (260±50 gf)		1-1825955-5
FSM7JAAH				5.2±1.0 N (520±100 gf)		1-1825955-6
FSM9JLH		7.3 mm (.287)		1.0±0.5 N (100±50 gf)		1-1825955-7
FSM9JH					1.6±0.5 N (160±50 gf)	
FSM9JAH				2.6±0.5 N (260±50 gf)		1-1825955-9
FSM9JAAH				5.2±1.0 N (520±100 gf)		2-1825955-0
FSM11JLH		8.0 mm (.315)		1.0±0.5 N (100±50 gf)		2-1825955-1
FSM11JH					1.6±0.5 N (160±50 gf)	
FSM11JAH				2.6±0.5 N (260±50 gf)		2-1825955-3
FSM11JAAH				5.2±1.0 N (520±100 gf)		2-1825955-4
FSM13JLH		13.0 mm (.512)		1.0±0.5 N (100±50 gf)		2-1825955-5
FSM13JH					1.6±0.5 N (160±50 gf)	
FSM13JAH				2.6±0.5 N (260±50 gf)		2-1825955-7
FSM13JAAH				5.2±1.0 N (520±100 gf)		2-1825955-8
FSM15JLH		17.0 mm (.669)		1.0±0.5 N (100±50 gf)		2-1825955-9
FSM15JH					1.6±0.5 N (160±50 gf)	
FSM15JAH				2.6±0.5 N (260±50 gf)		3-1825955-1
FSM15JAAH				5.2±1.0 N (520±100 gf)		3-1825955-2
FSM17JLH		8.5 mm (.335)		1.0±0.5 N (100±50 gf)		3-1825955-3
FSM17JH					1.6±0.5 N (160±50 gf)	
FSM17JAH				2.6±0.5 N (260±50 gf)		3-1825955-5
FSM17JAAH				5.2±1.0 N (520±100 gf)		3-1825955-6

Preferred parts in bold print

**FSMCD Series 6 x 6, Square Button, THT**

**Features**

- Square actuator
- Vertical and right angle



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	max 50 mA @ 24 VDC
Contact rating min.	min 10 µA @ 1 VDC
Electrical life	500,000 cycles
Mechanical life	500,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.6 to 2.6 N (160 to 260 gf)
Actuator travel	.025 mm (.010) average

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	265°C/10s wave

**Material specifications**

Contacts & terminals	copper alloy silver finish
Actuator & base	nylon 6/6
Cover	steel, tin finish
RoHS Directive 2002/95/EC	compliant

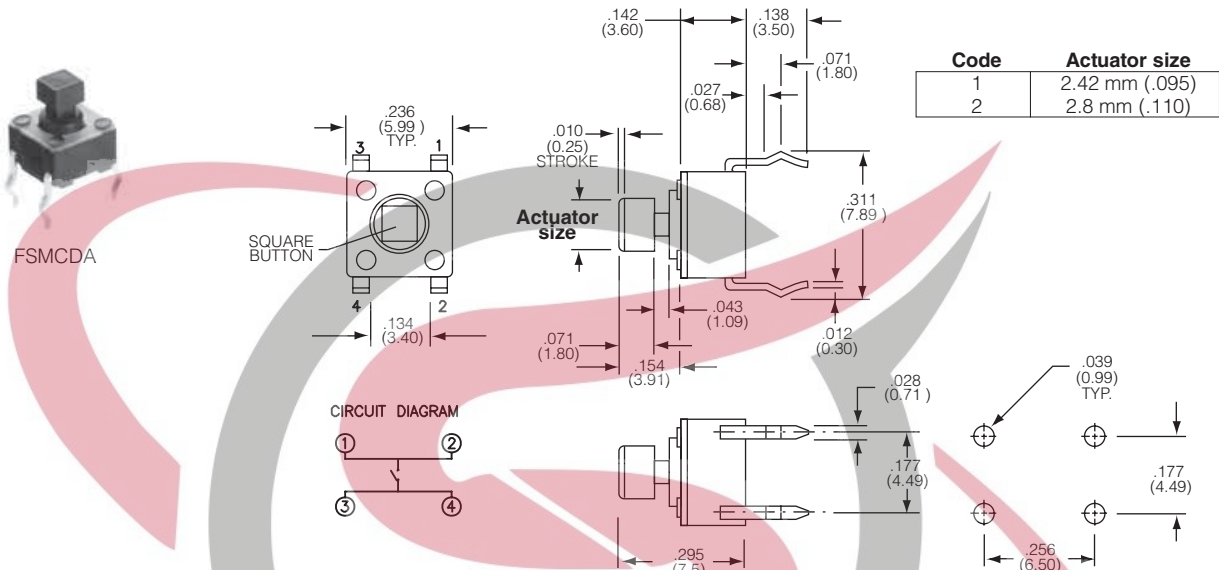
<b>Product key</b>	Typical product key	<b>FSM</b>	<b>CD</b>	<b>1</b>	<b>H</b>
<b>Type</b>	FSM Tactile switch 6 x 6 mm				
<b>Operating direction</b>	blank vertical RA horizontal, right angle				
<b>Version</b>	CD square button version				
<b>Actuator size</b>	1 2.42 mm (.095) 2 2.8 mm (.110)				
<b>Actuation force</b>	blank 1.6±0.5 N (160±50 gf) A 2.6±0.5 N (260±50 gf)				
<b>Temperature</b>	H high temperature version, high solder heat resistance				

**FSMCD Series 6 x 6, Square Button, THT (Continued)**

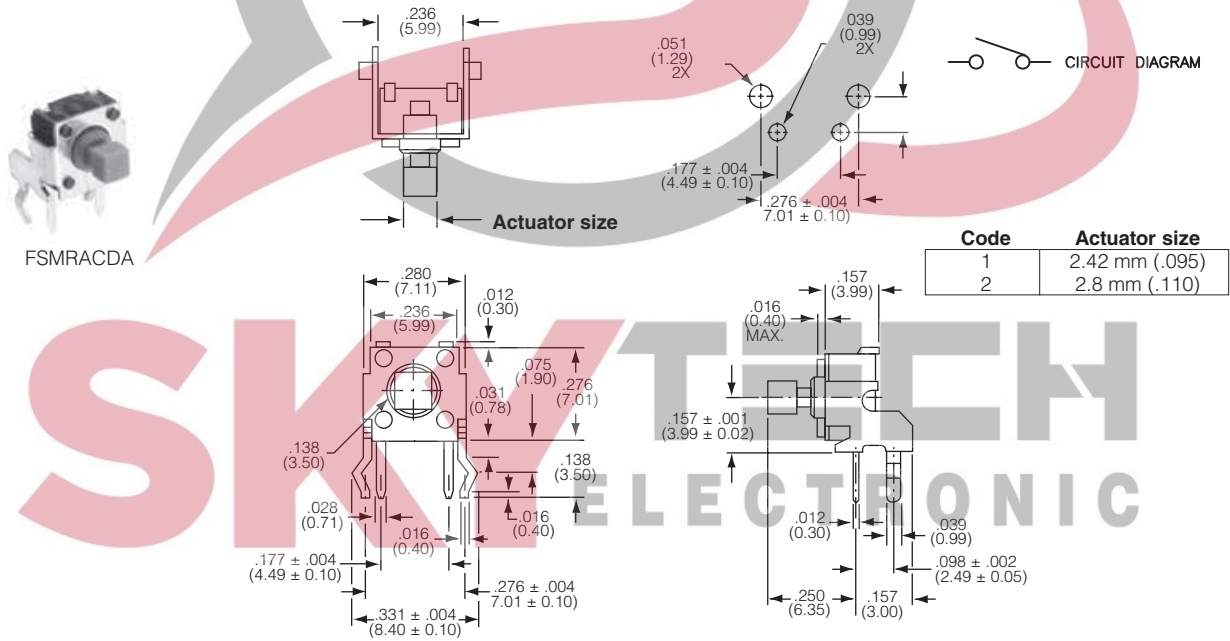
Operating direction



blank vertical version



RA right angle version



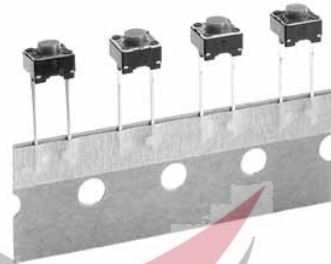
Product key	Operating direction	Version	Actuatore size	Actuation force	Temperature	Part Number
<b>FSMCD2H</b>	vertical	square button	2.80 mm (.110)	1.6±0.5 N (160±50 gf)	high	<b>1825967-2</b>
<b>FSMCD1H</b>	(.374)	version	2.42 mm (.095)		temperature	<b>1825967-1</b>
<b>FSMRACD2AH</b>	horizontal		2.80 mm (.110)	2.6±0.5 N (260±50 gf)	version	1825968-3
<b>FSMRACD2H</b>	right angle			1.6±0.5 N (160±50 gf)	high solder heat	<b>1825968-2</b>
<b>FSMRACD1H</b>	(.197)		2.42 mm (.095)		resistance	<b>1825968-1</b>

Preferred parts in bold print

**FSMJRT Series 6 x 6, Radial Tape, THT**

**Features**

- Radial tape packaged



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24 VDC
Contact rating min.	10 μA @ 1 VDC
Electrical life	500,000 cycles
Mechanical life	500,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.6 to 2.6 N (160 to 260 gf)
Actuator travel	0.25mm (.010) average

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	265°C/10s wave

**Material specifications**

Contacts & terminals	copper alloy silver finish
Actuator	acetal or pbt
Base	pbt
Cover	steel, tin finish
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM 2 J A RT**

**Type**

**FSM** Tactile switch 6 x 6 mm

**Actuator length**

<b>2</b>	4.3 mm (.169)
<b>4</b>	5.0 mm (.196)
<b>6</b>	7.0 mm (.276)
<b>8</b>	9.5 mm (.374)
<b>14</b>	13.0 mm (.512)

**Version**

**J** radial tape version

**Actuation force**

<b>blank</b>	1.6±0.5 N (160±50 gf)
<b>A</b>	2.6±0.5 N (260±50 gf)

**Packaging**

**RT** radial tape

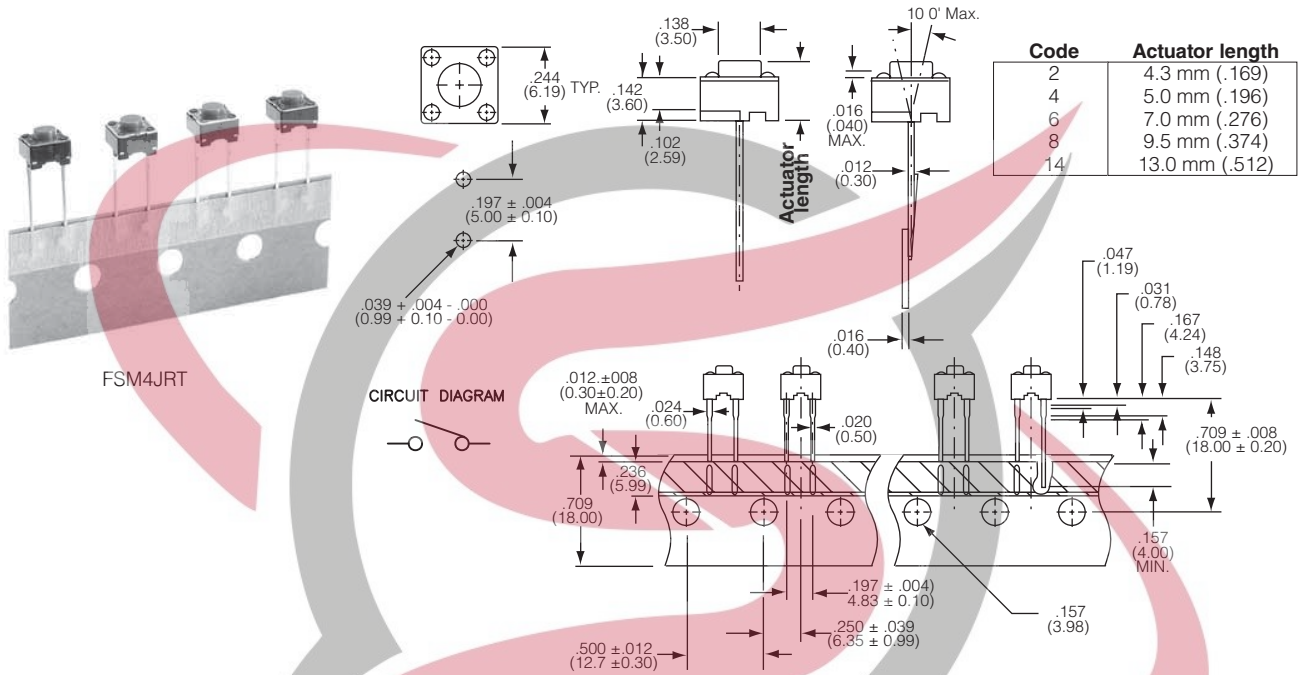
**FSMJRT Series 6 x 6, Radial Tape, THT (Continued)**

Actuator length



Codes 2, 4, 6, 8, 10, 12, 14, 16, 18

Tactile Switches



Product key	Actuator length	Version	Actuation force	Packaging	Part Number
FSM14JRT	13.0 mm (.512)	radial tape	1.6±0.5 N (160±50 gf)	radial type	1571010-1
FSM8JART	9.5 mm	version	2.6±0.5 N (260±50 gf)	tape & reel	147871-1
FSM8JRT	(.374)		1.6±0.5 N (160±50 gf)		147694-1
FSM6JART	7.0 mm		2.6±0.5 N (260±50 gf)		1571402-1
FSM6JRT	(.276)		1.6±0.5 N (160±50 gf)		4-1437565-8
FSM4JART	5.0 mm		2.6±0.5 N (260±50 gf)		147997-1
FSM4JRT	(.197)		1.6±0.5 N (160±50 gf)		4-1437565-0
FSM2JRT	4.3 mm		2.6±0.5 N (260±50 gf)		2-1437565-6
FSM2JART	(.169)		2.6±0.5 N (260±50 gf)		2-1437565-2





**FSMRAJ Series 6 x 6, Right Angle, THT**

**Features**

- Right angle mounting



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24 VDC
Contact rating min.	10 μA @ 1 VDC
Electrical life	500,000 cycles
Mechanical life	500,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.3 N (130 gf)
Actuator travel	0.25mm (.010) average

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	265°C/10s wave

**Material specifications**

Contacts & terminals	copper alloy silver finish
Actuator	nylon 6/6 or pbt
Base	nylon 6/6
Cover	steel tin finish
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM RA 2 JH L**

**Type**

**FSM** Tactile switch 6 x 6 mm

**Version**

**RA** right angle version

**Actuator length**

<b>1</b>	3.15 mm (.124)	<b>5</b>	6.15 mm (.242)
<b>2</b>	3.86 mm (.152)	<b>6</b>	6.85 mm (.270)
<b>3</b>	5.85 mm (.230)	<b>7</b>	11.85 mm (.467)
<b>4</b>	8.35 mm (.329)	<b>8</b>	15.85 mm (.624)

**Version**

**JH** high temperature version, high solder heat resistance

**Actuation force**

<b>L</b>	1.0±0.3 N (100±30 gf)	<b>A</b>	2.6±0.5 N (260±50 gf)
<b>blank</b>	1.6±0.5 N (160±50 gf)		

**FSMRAJ Series 6 x 6, Right Angle, THT (Continued)**

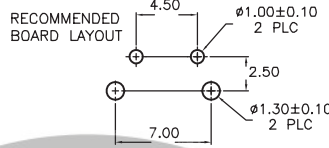
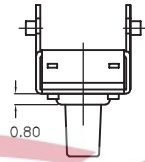
Actuator length



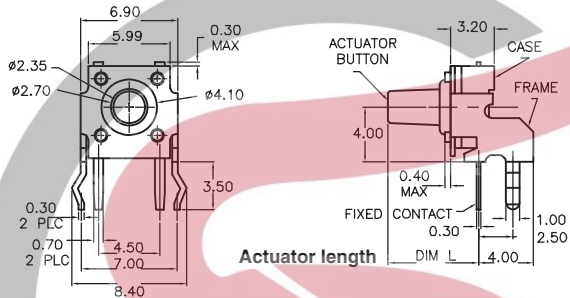
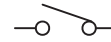
Codes 1, 2, 3, 4, 5, 6, 7, 8



FSMRA7J



CIRCUIT DIAGRAM



Code	Actuator length
1	3.15 mm (.124)
2	3.86 mm (.152)
3	5.85 mm (.230)
4	8.35 mm (.329)
5	6.15 mm (.242)
6	6.85 mm (.270)
7	11.85 mm (.467)
8	15.85 mm (.624)

Product key	Version	Actuator length	Version	Actuation force	Part Number
FSMRA1JHL	version		resistance	1.0±0.3 N (100±30 gf)	1825027-1
<b>FSMRA1JH</b>	right angle	(.124)	high solder heat	1.6±0.5 N (160±50 gf)	<b>1825027-2</b>
FSMRA1JHA		3.15 mm	version	2.6±0.5 N (260±50 gf)	1825027-3
FSMRA2JHL			temperature	1.0±0.3 N (100±30 gf)	1825027-4
<b>FSMRA2JH</b>		(.152)	high	1.6±0.5 N (160±50 gf)	<b>1825027-5</b>
FSMRA2JHA		3.86 mm		2.6±0.5 N (260±50 gf)	1825027-6
FSMRA3JHL				1.0±0.3 N (100±30 gf)	1825027-7
<b>FSMRA3JH</b>		(.230)		1.6±0.5 N (160±50 gf)	<b>1825027-8</b>
FSMRA3JHA		5.85 mm		2.6±0.5 N (260±50 gf)	1825027-9
FSMRA4JHL				1.0±0.3 N (100±30 gf)	1-1825027-0
<b>FSMRA4JH</b>		(.329)		1.6±0.5 N (160±50 gf)	<b>1-1825027-1</b>
FSMRA4JHA		8.35 mm		2.6±0.5 N (260±50 gf)	1-1825027-2
FSMRA5JHL				1.0±0.3 N (100±30 gf)	1-1825027-3
<b>FSMRA5JH</b>		(.242)		1.6±0.5 N (160±50 gf)	<b>1-1825027-4</b>
FSMRA5JHA		6.15 mm		2.6±0.5 N (260±50 gf)	1-1825027-5
FSMRA6JHL				1.0±0.3 N (100±30 gf)	1-1825027-6
<b>FSMRA6JH</b>		(.270)		1.6±0.5 N (160±50 gf)	<b>1-1825027-7</b>
FSMRA6JHA		6.85 mm		2.6±0.5 N (260±50 gf)	1-1825027-8
FSMRA7JHL				1.0±0.3 N (100±30 gf)	1-1825027-9
<b>FSMRA7JH</b>		(.467)		1.6±0.5 N (160±50 gf)	<b>2-1825027-0</b>
FSMRA7JHA		11.85 mm		2.6±0.5 N (260±50 gf)	2-1825027-1
FSMRA8JHL				1.0±0.3 N (100±30 gf)	2-1825027-2
<b>FSMRA8JH</b>		(.624)		1.6±0.5 N (160±50 gf)	<b>2-1825027-3</b>
FSMRA8JHA		15.85 mm		2.6±0.5 N (260±50 gf)	2-1825027-4

Preferred parts in bold print

**FSMJSM Series 6 x 6, SMT**

**Features**

- Surface mount
- Tape & reel packaging available



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24 VDC
Contact rating min.	10 µA @ 1 VDC
Electrical life	1,000,000 cycles
Mechanical life	1,000,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	0.7 to 2.6 N (70 to 260 gf)
Actuator travel	0.25 mm +0.20/-0.10 (.010 +.008/-.004)

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	260°C/10s reflow

**Material specifications**

Contacts & terminals	copper alloy silver finish
Actuator	pps or nylon
Base	pps
Cover	steel, tin finish
RoHS Directive 2002/95/EC	compliant

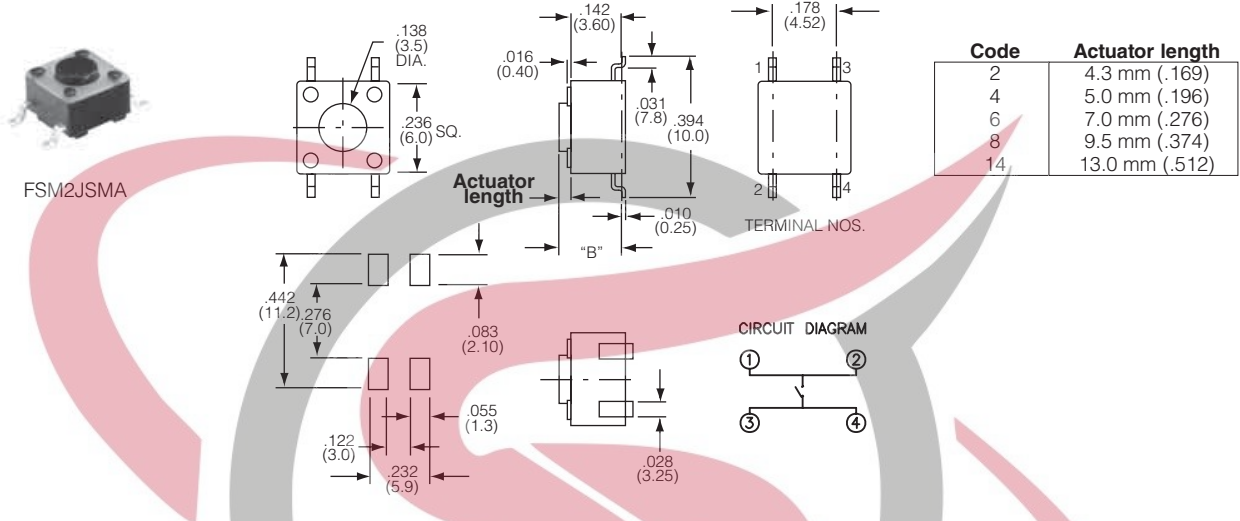
Product key		Typical product key					
		FSM	2	JSM	L	S	TR
<b>Type</b>	FSM Tactile switch 6 x 6 mm						
<b>Actuator length</b>							
2	4.3 mm (.169)	8	9.5 mm (.374)				
4	5.0 mm (.196)	14	13.0 mm (.512)				
6	7.0 mm (.276)						
<b>Version</b>	JSM surface mount version						
<b>Actuation force</b>							
XL	0.7±0.3 N (70±30 gf)	A	1.6±0.5 N (160±50 gf)				
L	1.0±0.3 N (100±30 gf)	AA	2.6±0.5 N (520±50 gf)				
<b>Switching dome</b>	S steel dome						
<b>Packaging</b>	blank bulk						
TR	tape & reel						

**FSMJSM Series 6 x 6, SMT (Continued)**

Actuator length



Codes 2, 4, 6, 8, 14



Code	Actuator length
2	4.3 mm (.169)
4	5.0 mm (.196)
6	7.0 mm (.276)
8	9.5 mm (.374)
14	13.0 mm (.512)

Tactile Switches

Product key	Actuator length	Version	Actuation force	Packaging	Part Number
<b>FSM2JSMAAS</b>	4.3 mm (.169)	version	2.6±0.5 N (260±50 gf)	bulk	<b>1977223-5</b>
<b>FSM2JSMAASTR</b>		surface mount		tape & reel	<b>1977223-6</b>
<b>FSM2JSMAS</b>		J-lead		bulk	<b>1977223-3</b>
<b>FSM2JSMASTR</b>	5.0 mm (.196)		1.6±0.5 N (160±50 gf)	tape & reel	<b>1977223-4</b>
<b>FSM2JSMLS</b>				bulk	<b>1977223-1</b>
<b>FSM2JSMLSTR</b>				tape & reel	<b>1977223-2</b>
<b>FSM4JSMAAS</b>				bulk	<b>1-1977223-1</b>
<b>FSM4JSMAASTR</b>				tape & reel	<b>1-1977223-2</b>
<b>FSM4JSMAS</b>				bulk	<b>1977223-9</b>
<b>FSM4JSMASTR</b>	tape & reel	<b>1-1977223-0</b>			
<b>FSM4JSMLS</b>	7.0 mm (.276)		1.0±0.3 N (100±30 gf)	bulk	1977223-7
<b>FSM4JSMLSTR</b>				tape & reel	1977223-8
<b>FSM6JSMAAS</b>				bulk	<b>1-1977223-9</b>
<b>FSM6JSMAASTR</b>				tape & reel	<b>2-1977223-0</b>
<b>FSM6JSMAS</b>				bulk	<b>1-1977223-7</b>
<b>FSM6JSMASTR</b>				tape & reel	<b>1-1977223-8</b>
<b>FSM6JSMLS</b>	9.5 mm (.374)		1.0±0.3 N (100±30 gf)	bulk	1-1977223-5
<b>FSM6JSMLSTR</b>				tape & reel	1-1977223-6
<b>FSM8JSMAAS</b>				bulk	2-1977223-5
<b>FSM8JSMAASTR</b>				tape & reel	2-1977223-6
<b>FSM8JSMAS</b>				bulk	2-1977223-3
<b>FSM8JSMASTR</b>				tape & reel	2-1977223-4
<b>FSM8JSMLS</b>	13.0 mm (.512)		1.0±0.3 N (100±30 gf)	bulk	2-1977223-1
<b>FSM8JSMLSTR</b>				tape & reel	2-1977223-2
<b>FSM14JSMAAS</b>				bulk	2-1977223-9
<b>FSM14JSMAS</b>				tape & reel	2-1977223-8
<b>FSM14JSMLS</b>				bulk	2-1977223-7

Preferred parts in bold print

**FSMLP Series 6 x 6, Low Profile, SMT**

**Features**

- Low profile design



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24 VDC
Contact rating min.	10 $\mu$ A @ 1 VDC
Electrical life	500,000 cycles
Mechanical life	500,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.6 to 2.6 N (160 to 260 gf)
Actuator travel	0.25 mm +0.20/-0.10 (.010 +.008/-.004)

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	260°C/10s reflow

**Material specifications**

Contacts	stainless steel silver finish/copper alloy silver finish
Actuator & base	PPS
Terminals	copper alloy silver finish
Cover	nickel silver/steel tin finish
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM 1 LP A S TR**

**Type**

**FSM** Tactile switch 6 x 6 mm

**Actuator length & grounding terminal**

<b>1</b>	3.1mm (.122), with grounding
<b>4</b>	4.3mm (.169), without grounding

**Version**

**LP** low profile version

**Actuation force**

<b>blank</b>	1.6±0.5 N (160±50 gf)
<b>A</b>	2.6±0.5 N (260±50 gf)

**Switching dome**

**S** steel dome

**Packaging**

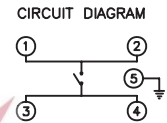
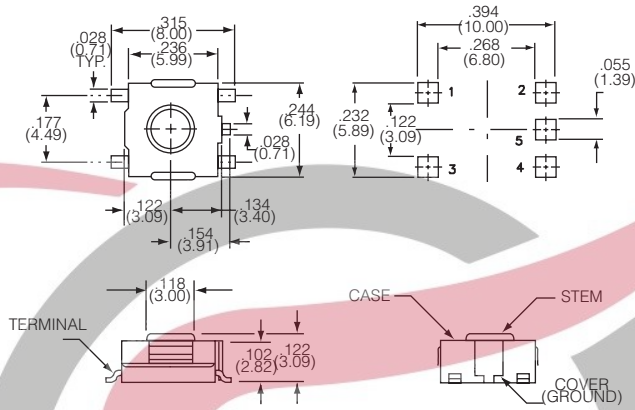
<b>blank</b>	bulk
<b>TR</b>	tape & reel

**FSMLP Series 6 x 6, Low Profile, SMT (Continued)**

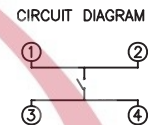
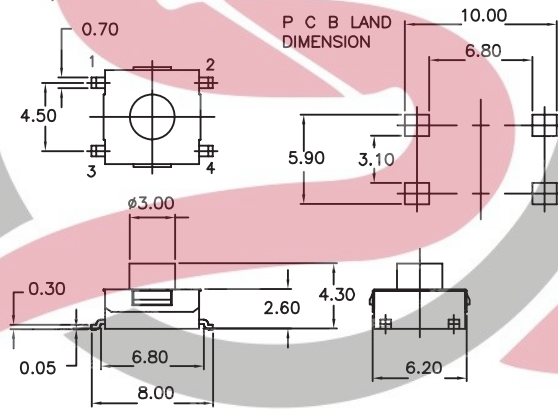
**Actuator length & grounding terminal**



**Code 1 with grounding terminal, 3.1 mm**



**Code 4 without grounding terminal, 4.3 mm**



Product key	Actuator length	Version	Actuation force	Packaging	Part Number
<b>FSM1LPS</b>	3.1 mm	low profile version	1.6±0.5 N (160±50 gf)	bulk	<b>1977263-1</b>
<b>FSM1LPAS</b>	(.169)		2.6±0.5 N (260±50 gf)		<b>1977263-2</b>
<b>FSM1LPASTR</b>				tape & reel	<b>1977263-3</b>
<b>FSM1LPSTR</b>			1.6±0.5 N (160±50 gf)		<b>1977263-4</b>
FSM4LPAS	4.3 mm		2.6±0.5 N (260±50 gf)	bulk	1977264-1
FSM4LPASTR	(.196)			tape & reel	1977264-2

Preferred parts in bold print

**FSMJEL Series 6 x 6, Extended Life, SMT**

**Features**

- Gullwing, J-lead and gullwing w/grnd terminal surface mount
- Low profile design
- Extended life cycle



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24 VDC
Contact rating min.	10 µA @ 1 VDC
Electrical life	100,000 to 2,000,000 cycles
Mechanical life	100,000 to 2,000,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	0.5 to 2.6 N (50 to 260 gf)
Actuator travel	0.20 mm (.008) average

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	260°C/10s reflow

**Material specifications**

Contacts	stainless steel silver finish
Actuator	nylon
Terminals	copper alloy silver finish
Base	PPS
Cover	copper alloy, tin finish or stainless steel
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM 1 JEL G TR**

**Type**

**FSM** Tactile switch 6 x 6 mm

**Actuator length**

<b>1</b>	2.0 mm (.079)
<b>2</b>	2.5 mm (.098)

**Version**

**JEL** extended life version

**Terminals**

<b>G</b>	gullwing
<b>GE</b>	gullwing with ground terminal
<b>J</b>	J-lead

**Actuation force**

<b>XL</b>	0.5±0.3 N (50±30 gf), 1,000,000 cycles	<b>blank</b>	1.6±0.5 N (160±50 gf), 1,000,000 cycles
<b>L</b>	1.0±0.5 N (100±50 gf), 1,000,000 cycles	<b>A</b>	2.6±0.5 N (520±50 gf), 100,000 cycles

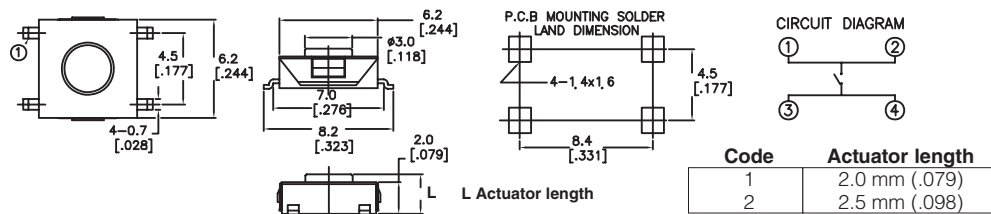
**Packaging**

<b>blank</b>	bulk
<b>TR</b>	tape & reel

**Terminal**

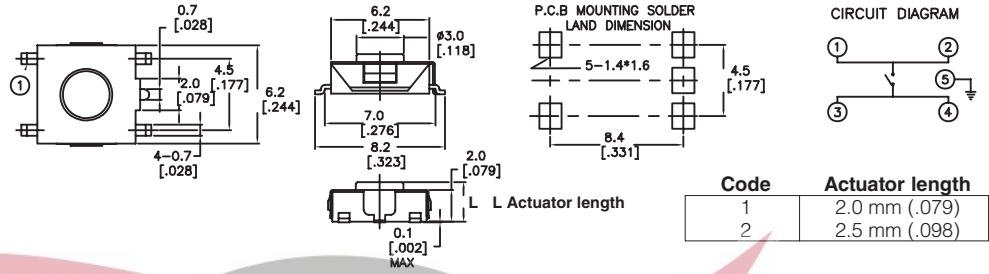


**G gullwing terminal**



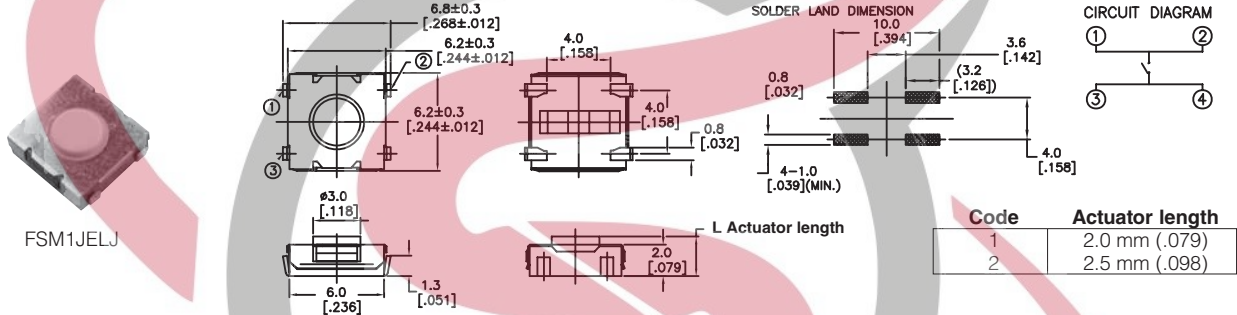
**FSMJEL Series 6 x 6, Extended Life, SMT (Continued)**

**GE gullwing with ground terminal**



Code	Actuator length
1	2.0 mm (.079)
2	2.5 mm (.098)

**J J-lead terminal**



Code	Actuator length
1	2.0 mm (.079)
2	2.5 mm (.098)

Product key	Actuator length	Version	Terminal	Actuation force	Life	Packaging	Part Number
FSM1JELG	2.0 mm (.079)	extended life version	gullwing with ground	1.6±0.5 N (160±50 gf)	1,000,000	bulk	1571626-7
FSM1JELGE						tape & reel	1571636-7
FSM1JELGETR						bulk	1571626-8
FSM2JELG	2.5 mm (.098)		gullwing with ground	2.6±0.5 N (260±50 gf)	100,000	bulk	<b>1571626-5</b>
FSM2JELGA						tape & reel	1571626-9
FSM2JELGATR						bulk	1-1571626-0
FSM2JELGE			gullwing with ground	1.6±0.5 N (160±50 gf)	1,000,000	bulk	<b>1571636-5</b>
FSM2JELGEA						tape & reel	1571636-9
FSM2JELGEATR						bulk	1-1571636-0
FSM2JELGEL			gullwing	1.0±0.3 N (100±30 gf)	1,000,000	bulk	1571636-3
FSM2JELGELTR						tape & reel	1571636-4
FSM2JELGEXL						bulk	1571636-1
FSM2JELGEXLTR			gullwing	0.5±0.3 N (50±30 gf)		tape & reel	1571636-2
FSM2JELGL						bulk	1571626-3
FSM2JELGLTR						tape & reel	1571626-4
FSM2JELGTR			gullwing	1.6±0.5 N (160±50 gf)		bulk	<b>1571626-6</b>
FSM2JELGXL						tape & reel	1571626-1
FSM2JELGXLTR						bulk	1571626-2
FSM2JELJ			J-lead	1.6±0.5 N (160±50 gf)	100,000	bulk	<b>1571625-5</b>
FSM2JELJA						tape & reel	1571625-7
FSM2JELJATR						bulk	1571625-8
FSM2JELJL			J-lead	1.0±0.3 N (100±30 gf)	1,000,000	bulk	1571625-3
FSM2JELJLTR						tape & reel	1571625-4
FSM2JELJTR						bulk	<b>1571625-6</b>
FSM2JELJXL			J-lead	0.5±0.3 N (50±30 gf)	2,000,000	bulk	1571625-1
FSM2JELJXLTR						tape & reel	1571625-2

Preferred parts in bold print



**FSMJX Series 6 x 6, Extreme Life Cycle, SMT**

**Features**

- The ultimate in tactile functionality
- 5,000,000 cycles
- Soft actuator allows ample over travel protection
- Tested to operate normally after being compressed for 10 years (reference 109-1098)
- Tape and reel packaging available



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24 VDC
Contact rating min.	10 μA @ 1 VDC
Electrical life	5,000,000 cycles
Mechanical life	5,000,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	250 VAC for 1 min
Actuation force	1.6 +/-0.5 N (160 +/-50 gf)
Actuator travel	0.38 mm (.015) average

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	260°C/10s reflow

**Material specifications**

Contacts	stainless steel silver finish
Actuator	silicon rubber
Terminals	copper alloy silver finish
Base	pps
Cover	stainless steel
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM JX**

**Type**

**FSM** Tactile switch 6 x 6 mm

**Version**

**JX** extreme life cycle version

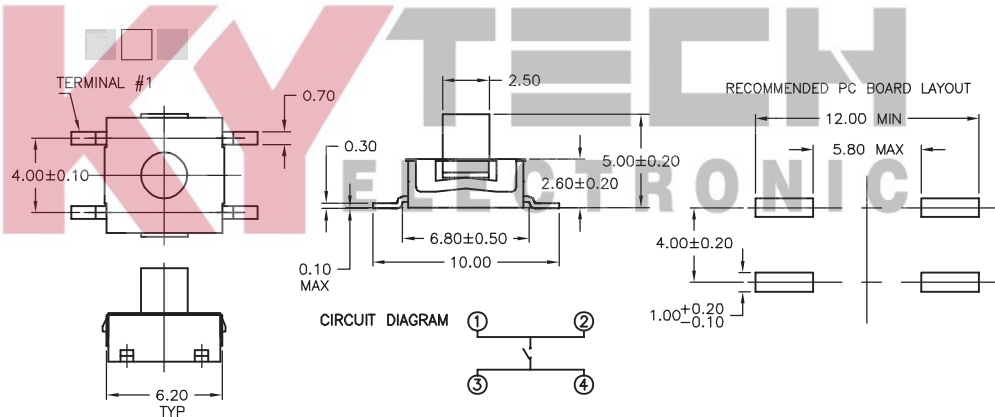
**Packaging**

**blank** bulk  
**TR** tape & reel

**Extreme life cycle version**



FSMJX

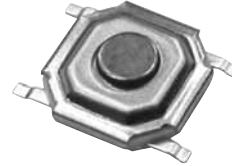


Product key	Version	Packaging	Part Number
FSMJX	extreme	bulk	1571634-1
FSMJXTR	life cycle	tape & reel	1571634-2

**FSMCT Series 5.2 x 5.2, Ultra Low Profile, SMT**

**Features**

- Ultra low profile design
- Metal actuator



Tactile Switches

**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24 VDC
Contact rating min.	10 µA @ 1 VDC
Electrical life	500,000 to 1,000,000 cycles
Mechanical life	500,000 to 1,000,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.6 to 2.6 N (160 to 260 gf)
Actuator travel	0.25 mm +0.10/-0.20 (.010 +.004/-.008)

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	260°C/10s reflow

**Material specifications**

Contacts	stainless steel silver finish
Actuator	copper alloy
Terminals	copper alloy silver finish
Base	nylon 46
Cover	stainless steel
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM CT TR**

**Type**

**FSM** Tactile switch 5.2 x 5.2 mm

**Version**

**CT** ultra low profile version

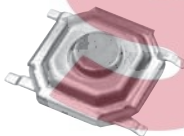
**Actuation force**

**blank** 1.6±0.5 N (160±50 gf), 1,000,000 cycles  
**A** 2.6±0.5 N (260±50 gf), 500,000 cycles

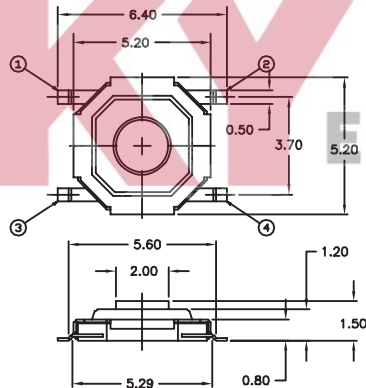
**Packaging**

**TR** tape & reel

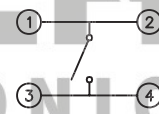
**Ultra low profile version**



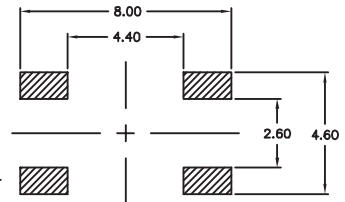
FSMCTTR



**CIRCUIT DIAGRAM**



**P.C. BOARD LAYOUT**



Product key	Version	Actuation force	Life	Packaging	Part Number
<b>FSMCTTR</b>	ultra low	1.6±0.5 N (160±50 gf)	1,000,000	tape & reel	<b>8-1437565-0</b>
<b>FSMCTATR</b>	profile version	2.6±0.5 N (260±50 gf)	500,000	tape & reel	<b>8-1437565-1</b>

Preferred parts in bold print

**FSMLPU Series 4.8 x 4.8, Slimline, SMT**

**Features**

- Ultra low (0.50mm) profile design



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24 VDC
Contact rating min.	10 µA @ 1 VDC
Electrical life	500,000 cycles
Mechanical life	500,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.6 N (160 gf)
Actuator travel	0.20 mm (.008) average

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	260°C/10s reflow

**Material specifications**

Contacts	stainless steel silver finish
Terminals	copper alloy silver finish
Base	nylon 46
Masking	PL film
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM LPU TR**

**Type**

**FSM** Tactile switch 4.8 x 4.8 mm

**Version**

**LPU** slimline version

**Packaging**

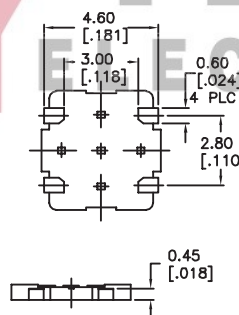
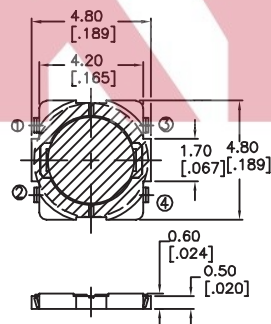
**TR** tape & reel

**Version**

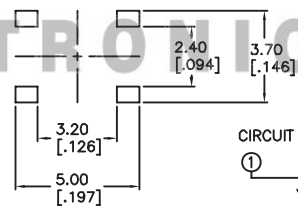
**LPU** slimline version



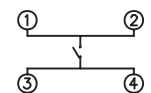
FSMLPUTR



**SOLDER PAD LAYOUT**



**CIRCUIT DIAGRAM**



Product key	Version	Actuation force	Packaging	Part Number
<b>FSMLPUTR</b>	slimline version	1.6±0.5 N (160±50 gf)	tape & reel	<b>1825534-1</b>

Preferred parts in bold print

**FSMJS6 Series 6 x 6, Sealed, SMT**

**Features**

- Sealed to IP67
- Tape & reel available



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24VDC
Contact rating min.	10 iA @ 1 VDC
Electrical life	1,000,000 cycles
Mechanical life	1,000,000 cycles
Contact resistance	max. 100mOhm
Capacitance	min. 100MOhm
Insulation resistance	250 VAC for 1 min
Actuation force	1.6 N (160 gf)
Actuator travel	0.20 mm (.008) average

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	260°C/10s reflow
Seal	IP67

**Material specifications**

Contacts	stainless steel silver finish
Actuator	nylon
Terminals	copper alloy silver finish
Base	nylon
Cover	stainless steel
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM 2 JS6 SM TR**

**Type**

**FSM** Tactile switch 6 x 6 mm, sealed

**Actuator length**

**2** 4.3 mm

**Version**

**JS6** sealed version 6 x 6

**Terminal**

**SM** surface mount - SMD

**Packaging**

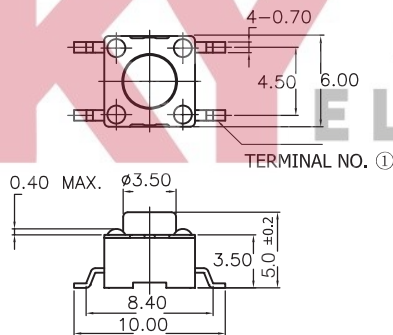
**blank** bulk **TR** tape & reel

**Version**

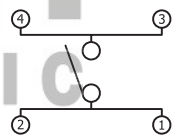
**JS6** sealed version 6 x 6 mm



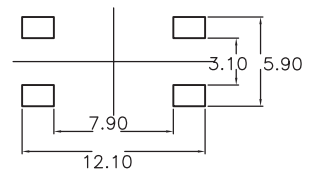
FSM2JS6SM



**CIRCUIT DIAGRAM**



**P.C.B. LAND DIMENSION**



Product key	Terminal	Actuation force	Packaging	Part Number
<b>FSM2JS6SM</b>	SMT	1.6±.5 N (160±50 gf)	bulk	<b>1977265-1</b>
<b>FSM2JS6SMTR</b>			tape & reel	<b>1977265-2</b>

Preferred parts in bold print

**FSMJS Series 7.6 x 7.3, Sealed, SMT & THT**

**Features**

- Sealed to IP67
- Through hole and surface mount
- Tape & reel available on SMT versions



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24 VDC
Contact rating min.	10 μA @ 1 VDC
Electrical life	1,000,000 cycles
Mechanical life	1,000,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.6 to 2.6 N (160 to 260 gf)
Actuator travel	0.25 mm (.010) average

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	265°C for 10s wave or 260°C for 10s reflow
Seal	IP67

**Material specifications**

Contacts	stainless steel silver finish
Actuator & base	46 nylon
Terminals	copper alloy silver finish
Bracket	nickel silver
Seal	silicon rubber
RoHS Directive 2002/95/EC	compliant

Product key		Typical product key				
		FSM	2	JS	SM	TR
<b>Type</b>	FSM Tactile switch 7.6 x 7.3 mm					
<b>Actuator length &amp; grounding terminal</b>						
1	3.3mm (.130) with Gnd					
2	4.3mm (.169)					
4	5.0mm (.197)					
<b>Version</b>	JS sealed version					
<b>Terminal</b>						
blank	through hole - THT					
SM	surface mount - SMD					
<b>Actuation force</b>						
blank	1.6±0.5 N (160±50 gf)					
A	2.6±0.5 N (260±50 gf)					
<b>Packaging</b>						
blank	bulk					
TR	tape & reel					

**FSMJ Series 7.6 x 7.3, Sealed, SMT & THT (Continued)**

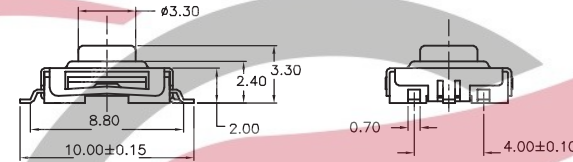
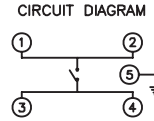
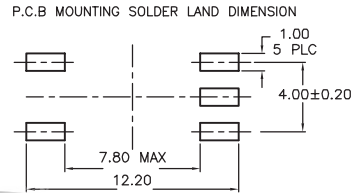
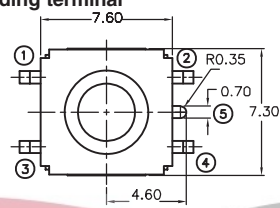
**Actuator length & grounding terminal, THT & SMT**

Tactile Switches

**Code 1 SMT, with grounding terminal**



FSM1JSSM

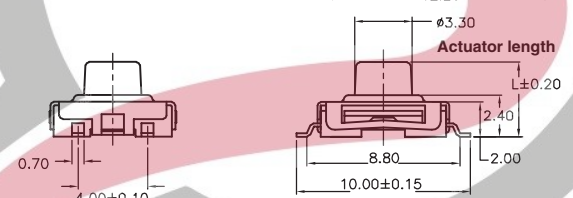
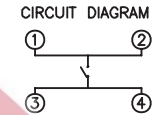
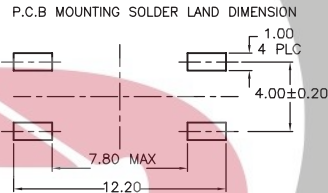
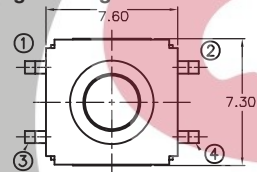


Code	Actuator length
1	3.3mm (.130) with Gnd

**Codes 2, 4 SMT, without grounding terminal**

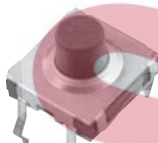


FSM2JSSM

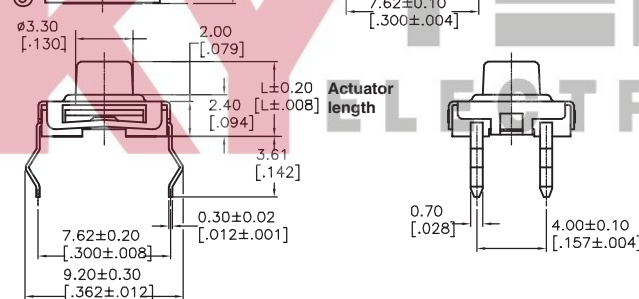
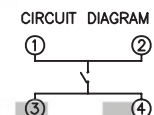
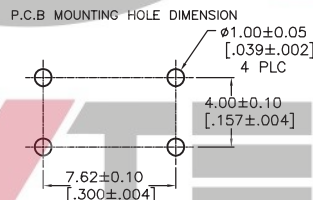
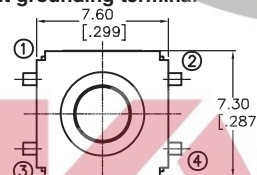


Code	Actuator length
2	4.3mm (.169)
4	5.0mm (.197)

**Codes 2, 4 THT, without grounding terminal**



FSM2JS



Code	Actuator length
2	4.3mm (.169)
4	5.0mm (.197)

**FSMJ5 Series 7.6 x 7.3, Sealed, SMT & THT (Continued)**

Product key	Version	Actuator length	Grounding	Terminal	Actuation force	Packaging	Part Number
<b>FSM2JSSM</b>	sealed	4.3 mm	without	SMT	1.6±0.5 N (160±50 gf)	bulk	<b>1571294-1</b>
<b>FSM2JSSMTR</b>	version	(.169)	ground		1.6±0.5 N (160±50 gf)	tape & reel	<b>1571294-2</b>
<b>FSM4JSSM</b>		5.0 mm			1.6±0.5 N (160±50 gf)	bulk	<b>1571294-3</b>
<b>FSM4JSSMTR</b>		(.196)			1.6±0.5 N (160±50 gf)	tape & reel	<b>1571294-4</b>
FSM2JSSMA		4.3 mm			2.6±0.5 N (260±50 gf)	bulk	1571294-5
FSM2JSSMATR		(.169)			2.6±0.5 N (260±50 gf)	tape & reel	1571294-6
<b>FSM1JSSM</b>		3.3 mm	with		1.6±0.5 N (160±50 gf)	bulk	<b>1571296-1</b>
<b>FSM1JSSMTR</b>		(.130)	ground		1.6±0.5 N (160±50 gf)	tape & reel	<b>1571296-2</b>
<b>FSM2JS</b>		4.3 mm (.169)	without	THT	1.6±0.5 N (160±50 gf)	bulk	<b>1571295-1</b>
<b>FSM4JS</b>		5.0 mm (.196)	ground		1.6±0.5 N (160±50 gf)		<b>1571295-2</b>

Preferred parts in bold print



**FSMRAJS Series 6 x 6, Sealed, Right Angle, SMT & THT**

**Features**

- Sealed to IP67
- Right angle through hole or surface mount



Tactile Switches

**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24 VDC
Contact rating min.	10 µA @ 1 VDC
Electrical life	1,000,000 cycles
Mechanical life	1,000,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.3 N (130 gf)
Actuator travel	0.35 mm (.014) average

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	265°C/10s wave or 260°C/10s reflow
Seal	IP67

**Material specifications**

Contacts	stainless steel silver finish
Actuator	silicon rubber
Terminals	copper alloy silver finish
Base	46 nylon or pps
Cover	nickel silver
Seal	silicon rubber
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM RAJS 3 SM TR**

**Type**

**FSM** Tactile switch 6 x 6 mm

**Version**

**RAJS** sealed, right angle version

**Actuator length**

<b>1</b>	1.60 mm (.063)
<b>2</b>	3.85 mm (.152)
<b>3</b>	3.96 mm (.156)
<b>4</b>	6.85 mm (.270)

**Terminal**

<b>blank</b>	through hole - THT
<b>SM</b>	surface mount - SMD

**Packaging**

<b>blank</b>	bulk
<b>TR</b>	tape & reel



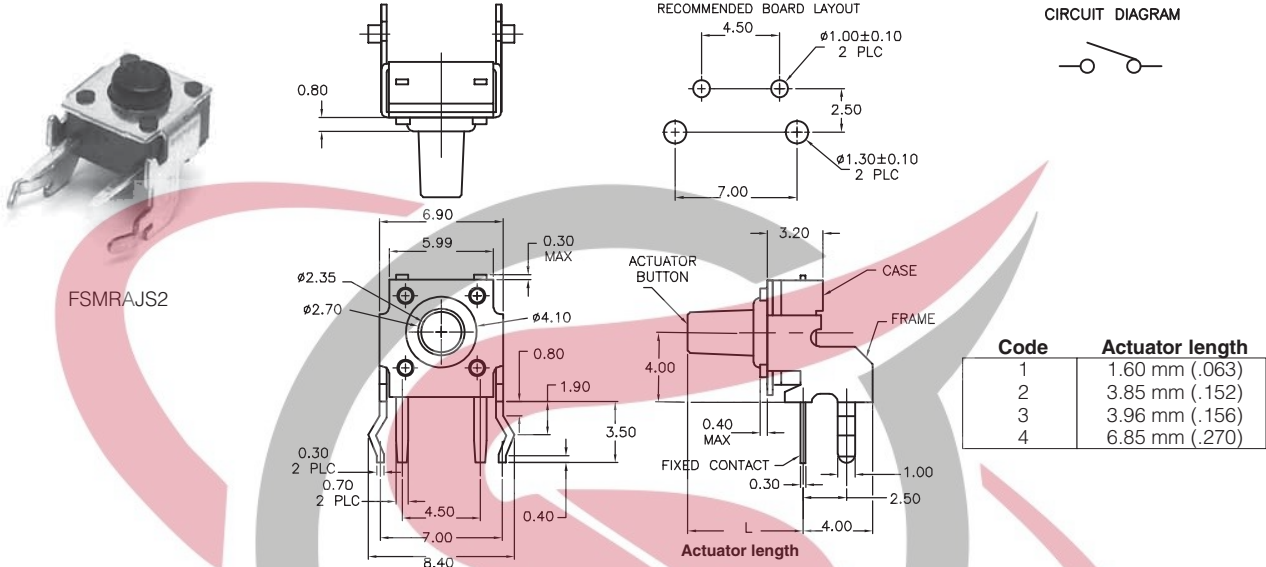


**FSMRAJS Series 6 x 6, Sealed, Right Angle, SMT & THT (Continued)**

**THT version**



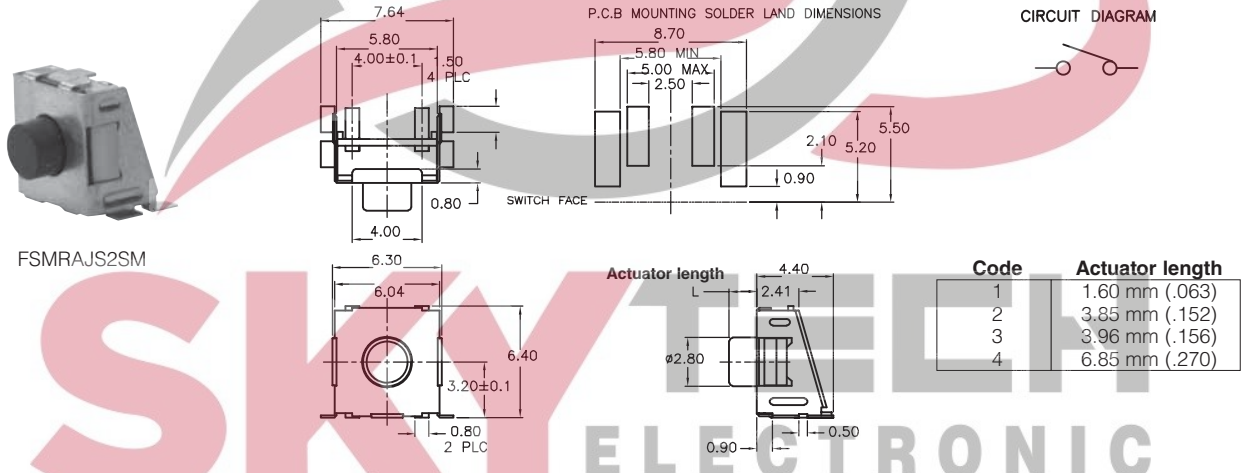
**Actuator length, codes 1, 2, 3, 4**



**SMT version**



**Actuator length, codes 1, 2, 3, 4**



Product key	Version	Actuator length	Terminal	Packaging	Part Number
FSMRAJS3SM	sealed,	3.96 mm	SMT	bulk	1571407-3
<b>FSMRAJS1SMTR</b>	right angle	1.60 mm		tape & reel	<b>1571407-2</b>
<b>FSMRAJS1SM</b>	version			bulk	<b>1571407-1</b>
FSMRAJS2		3.85 mm	THT		1571610-2
FSMRAJS4		6.85 mm			1571610-1

Preferred parts in bold print

**FSMRAJSA Series 8.1 x 8.1, Sealed, Right Angle, SMT**

**Features**

- Sealed to IP67
- Right angle surface mount



Tactile Switches

**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24 VDC
Contact rating min.	10 μA @ 1 VDC
Electrical life	1,000,000 cycles
Mechanical life	1,000,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.3 N (130 gf)
Actuator travel	0.35mm (.014) Average

**Environmental specification**

Operating temperature	-35 to +105°C
Storage temperature	-35 to +105°C
Solder heat resistance	260°C/10s reflow
Seal	IP67

**Material specifications**

Contacts	stainless steel silver finish
Actuator	silicon rubber
Terminals	copper alloy silver finish
Base	46 nylon
Cover	nickel silver
Seal	silicon rubber
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM RAJSA P**

**Type**

**FSM** Tactile switch 8.1 x 8.1 mm

**Version**

**RAJSA** sealed, right angle, surface mount version

**Location pin**

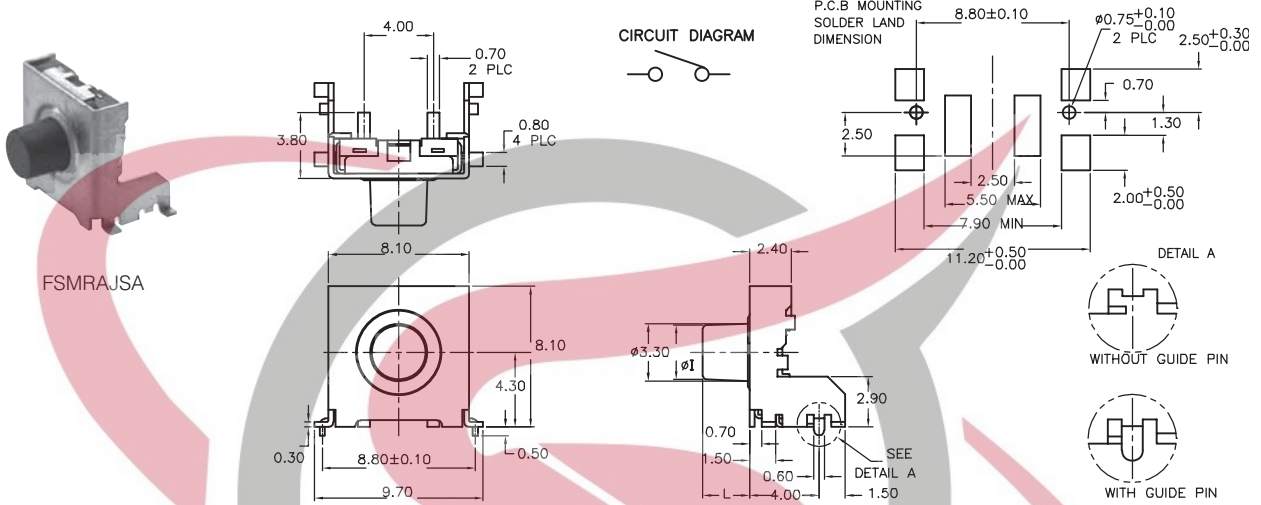
**blank** no pins  
**P** with pins



**FSMRAJSA Series 8.1 x 8.1, Sealed, Right Angle, SMT (Continued)**

Location pin

Codes blank, P without/with location pins



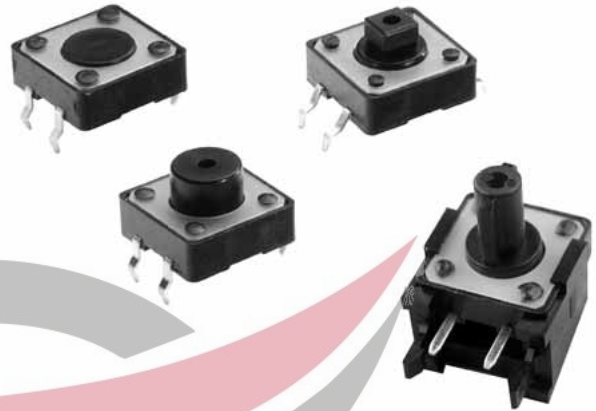
Product key	Version	Location pin	Actuation force	Part Number
FSMRAJSAP	sealed,	with pins	1.3±0.5 N (130±50 gf)	1571300-2
FSMRAJSA	right angle	without pins		1571300-1

**SKY** **TECH**  
ELECTRONIC

**FSM10 Series 12 x 12, THT**

**Features**

- Optional actuator configurations



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	max 50 mA @ 24 VDC
Contact rating min.	min 10 $\mu$ A @ 1 VDC
Electrical life	100,000 cycles
Mechanical life	100,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.6 to 2.6 N (160 to 260 gf)
Actuator travel	0.30 mm (.012) average

**Environmental specification**

Operating temperature	-35 to +85°C
Storage temperature	-35 to +85°C
Solder heat resistance	265°C/10s wave

**Material specifications**

Contacts	copper alloy silver finish
Actuator	acetal
Terminals	copper alloy silver finish
Base	pbt
Cover	pet film
Bracket (R/A)	nylon
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM 10 0 A**

**Type**

**FSM** Tactile switch 12 x 12 mm

**Version**

**10** standard, THT

**Actuator length**

<b>0</b>	4.3 mm (.169)	<b>3</b>	7.3 mm (.287)
<b>1</b>	8.5 mm (.335)	<b>4</b>	9.0 mm (.354), right angle
<b>2</b>	12.0 mm (.472)		

**Actuation force**

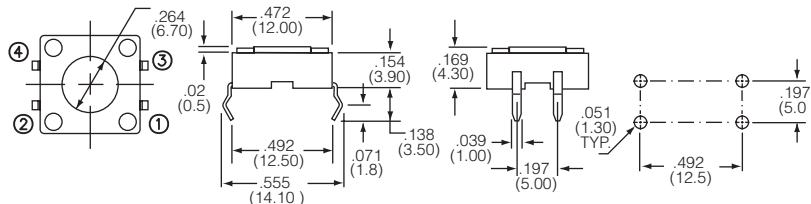
<b>blank</b>	1.6 N (160 gf)
<b>A</b>	2.6 N (260 gf)

**Actuator length**

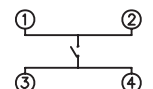
**0** actuator length 4.3 mm (.169)



FSM100

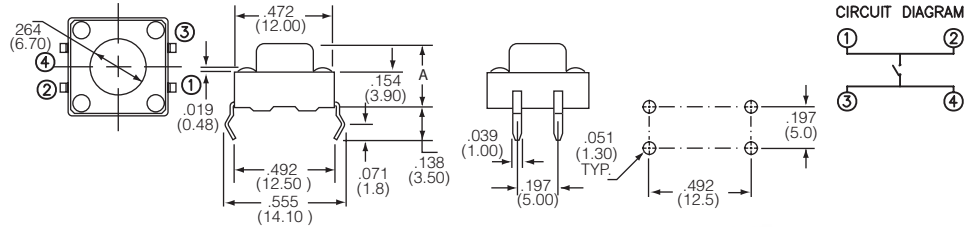


**CIRCUIT DIAGRAM**

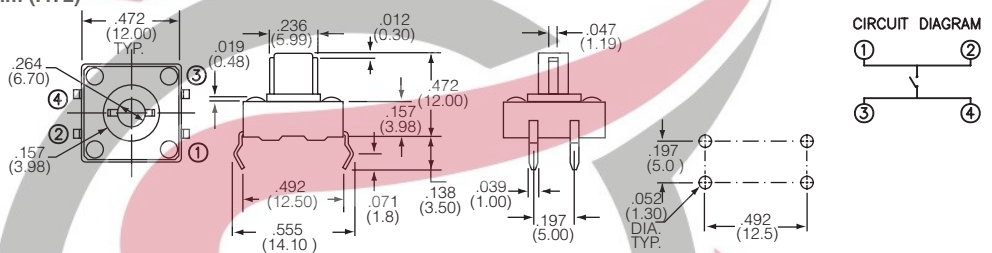


**FSM10 Series 12 x 12, THT (Continued)**

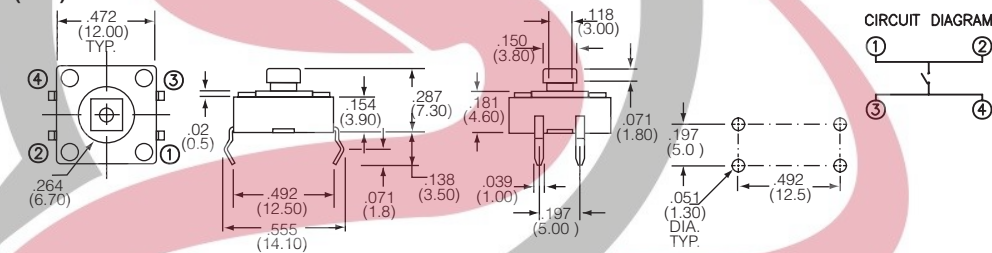
**1 actuator length 8.5 mm (.335)**



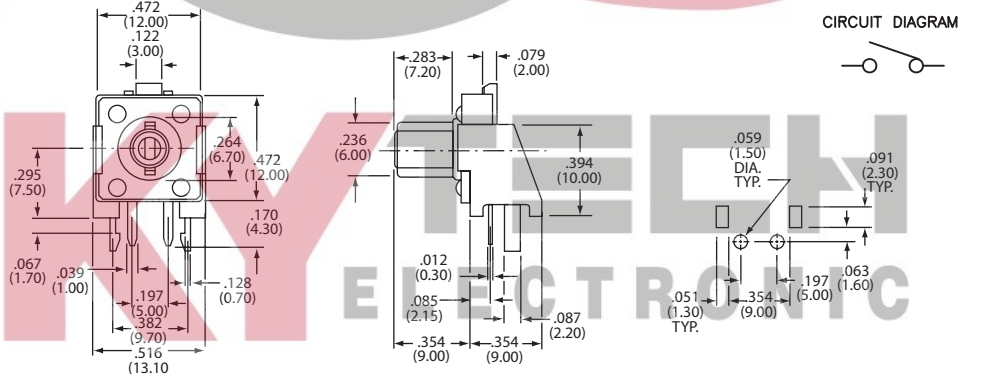
**2 actuator length 12.0 mm (.472)**



**3 actuator length 7.3 mm (.287)**



**4 actuator length 9.0 mm (.354), right angle**



Product key	Version	Actuator length	Actuation force	Part Number
<b>FSM100</b>	standard	4.3 mm	1.6 N (160 gf)	<b>1437565-2</b>
FSM100A	THT	(.169)	2.6 N (260 gf)	1571139-1
<b>FSM101</b>		8.5 mm	1.6 N (160 gf)	<b>1437565-3</b>
FSM101A		(.335)	2.6 N (260 gf)	1571140-1
<b>FSM102</b>		12.0 mm	1.6 N (160 gf)	<b>1437565-4</b>
FSM102A		(.472)	2.6 N (260 gf)	1571061-1
<b>FSM103</b>		7.3 mm	1.6 N (160 gf)	<b>1437565-5</b>
FSM103A		(.287)	2.6 N (260 gf)	1571621-1
<b>FSM104</b>		9.0 mm (.354) right angle	1.6 N (160 gf)	<b>1437565-6</b>

Preferred parts in bold print

**FSM10 Series 12 x 12, Sealed, SMT & THT**

**Features**

- Optional actuator configurations
- Optional mounting configurations
- Sealed to IP67



Tactile Switches

**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	max 50 mA @ 24 VDC
Contact rating min.	min 10 $\mu$ A @ 1 VDC
Electrical life	1,000,000 cycles
Mechanical life	1,000,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	1.6 to 2.6 N (160 to 260 gf)
Actuator travel	0.35 mm (.014) average

**Environmental specification**

Operating temperature	-35 to +85°C
Storage temperature	-35 to +85°C
Solder heat resistance	260°C/10s reflow or 265°C/10s wave
Sealing	IP67

**Material specifications**

Contacts	stainless steel silver finish
Actuator	pps
Terminals	copper alloy silver finish
Base	nylon
Cover	stainless steel
Seal	silicon rubber
RoHS Directive 2002/95/EC	compliant

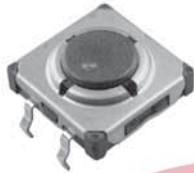
<b>Product key</b>	Typical product key	<b>FSM</b>	<b>10</b>	<b>3</b>	<b>S</b>		<b>SM</b>	<b>TR</b>
<b>Type</b>	FSM Tactile switch 12 x 12 mm							
<b>Version</b>	10 standard							
<b>Actuator length</b>	0 4.3 mm (.169) 3 7.3 mm (.287) square							
<b>Version</b>	S sealed version							
<b>Location pins</b>	blank no pins P with pins							
<b>Terminal</b>	blank through hole - THT SM surface mount - SMT							
<b>Actuation force</b>	blank 1.6 $\pm$ .5 N (160 $\pm$ 50 gf) A 2.6 $\pm$ .5 N (260 $\pm$ 50 gf)							
<b>Packaging</b>	blank bulk TR tape & reel							

**FSM10 Series 12 x 12, Sealed, SMT & THT (Continued)**

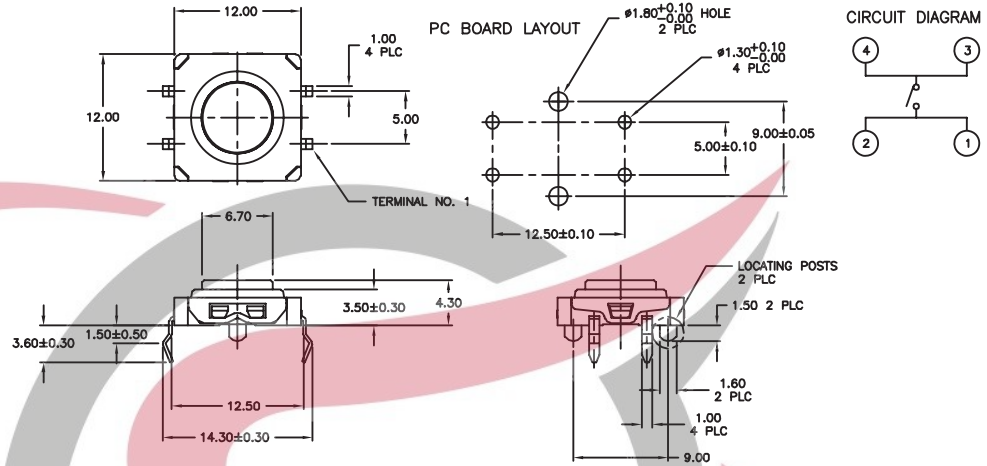
Actuator length, Location pins, Terminal



**0 4.3 mm, without and with location pins, through hole THT**



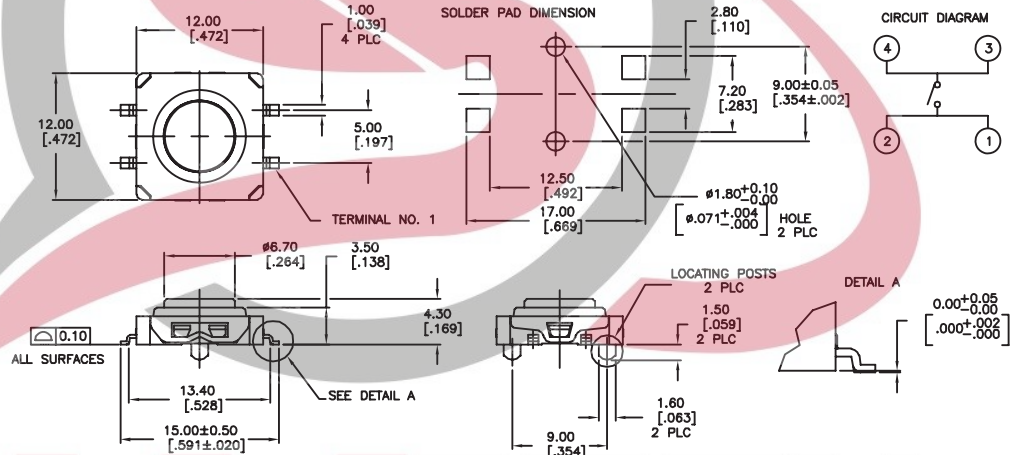
FSM100S



**0 4.3 mm, without and with location pins, surface mount SMT**



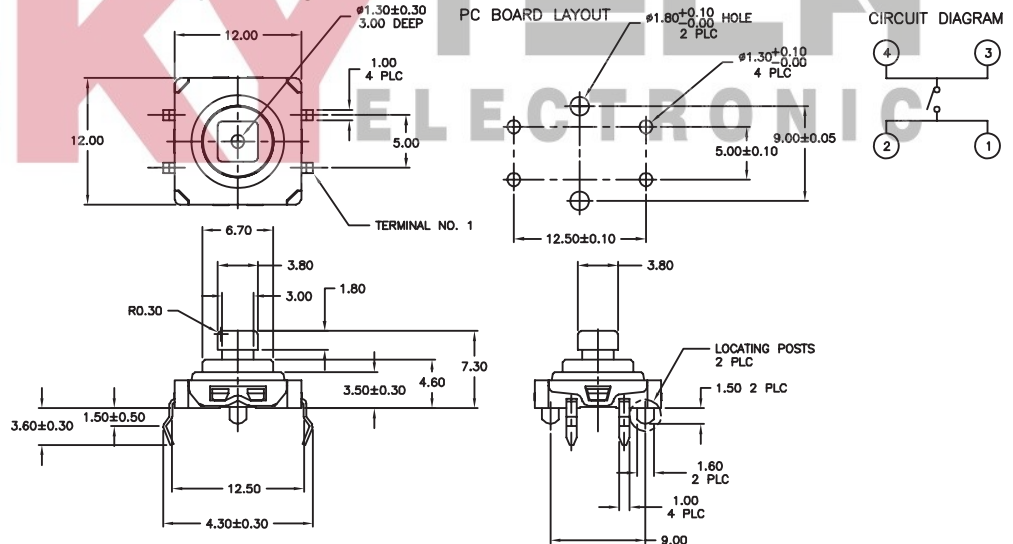
FSM100SM



**3 7.3 mm square, without and with location pins, through hole THT**



FSM103S

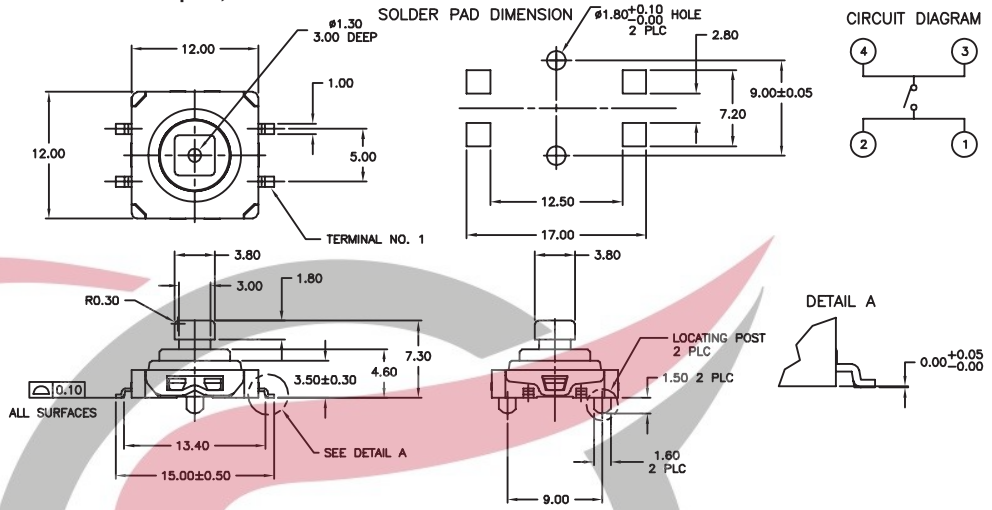


**FSM10 Series 12 x 12, Sealed, SMT & THT (Continued)**

**3 7.3 mm square, without and with location pins, surface mount SMT**



FSM103SM



Product key	Version	Actuator length	Version	Location pins	Terminal	Act. force	Packaging	Part Number
FSM100S	standard	4.3 mm	sealed	no pins	THT	1.6±.5 N	bulk	1571220-1
FSM100SP	THT	(.169)	version	with pins		(160±50 gf)		1571220-2
FSM100SPSM					SMT		tape & reel	1571218-2
FSM100SPSMTR							bulk	1571218-4
FSM100SSM				no pins				1571218-1
FSM100SSMA						2.6±.5 N		1571218-5
FSM100SSMATR						(260±50 gf)	tape & reel	1571218-6
FSM100SSMTR						1.6±.5 N		1571218-3
FSM103S		7.3 mm			THT	(160±50 gf)	bulk	1571219-1
FSM103SP		(.287)		with pins				1571219-2
FSM103SPSM					SMT			1571217-2
FSM103SPSMTR							tape & reel	1571217-4
FSM103SSM				no pins			bulk	1571217-1
FSM103SSMTR							tape & reel	1571217-3





**FSMMSH Series 2.55 x 4.5, Miniature Side Action, SMT**

**Features**

- Small PCB space required
- Tape & reel packaging



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24VDC
Contact rating min.	10 µA @ 1 VDC
Electrical life.	100,000 cycles
Mechanical life.	100,000 cycles
Contact resistance	max. 500mOhm
Capacitance	min. 100MOhm
Insulation resistance	500 VAC for 1 min
Actuation force.	1.6 N (160 gf)
Actuator travel.	0.20 mm (.008) average

**Environmental specification**

Operating temperature	-35 to +85°C
Storage temperature	-35 to +85°C
Solder heat resistance	260°C/10s reflow

**Material specifications**

Contacts	stainless steel silver finish
Actuator	PPA
Terminals	copper alloy silver finish
Base	PPA
Cover	steel tin finish
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM MSH P TR**

**Type**

**FSM** Side action tactile switch, 2.55 x 4.5 mm

**Version**

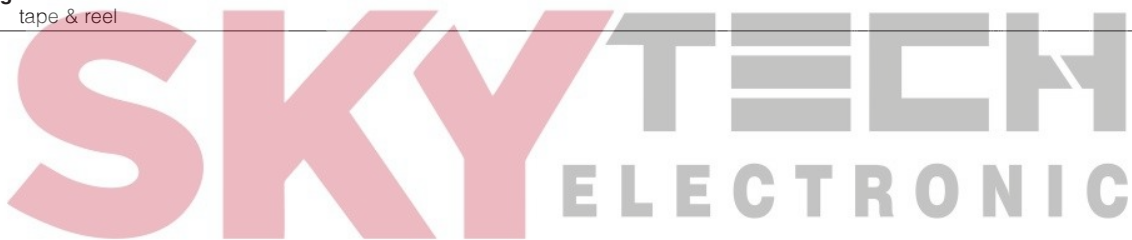
**MSH** standard

**Location pins**

**blank** no pins      **P** with pins

**Packaging**

**TR** tape & reel

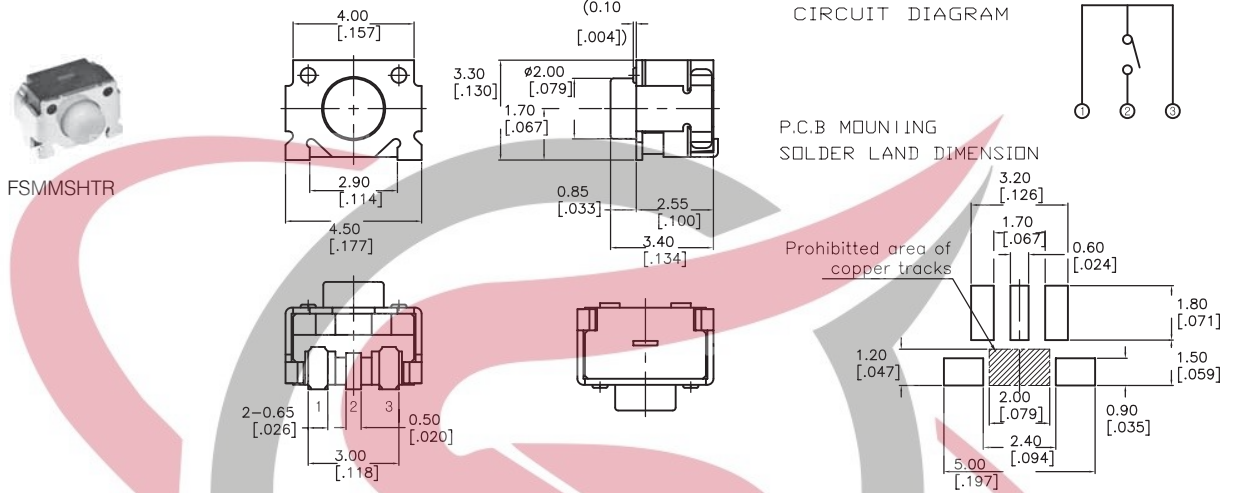


**FSMMSH Series 2.55 x 4.5, Miniature Side Action, SMT (Continued)**

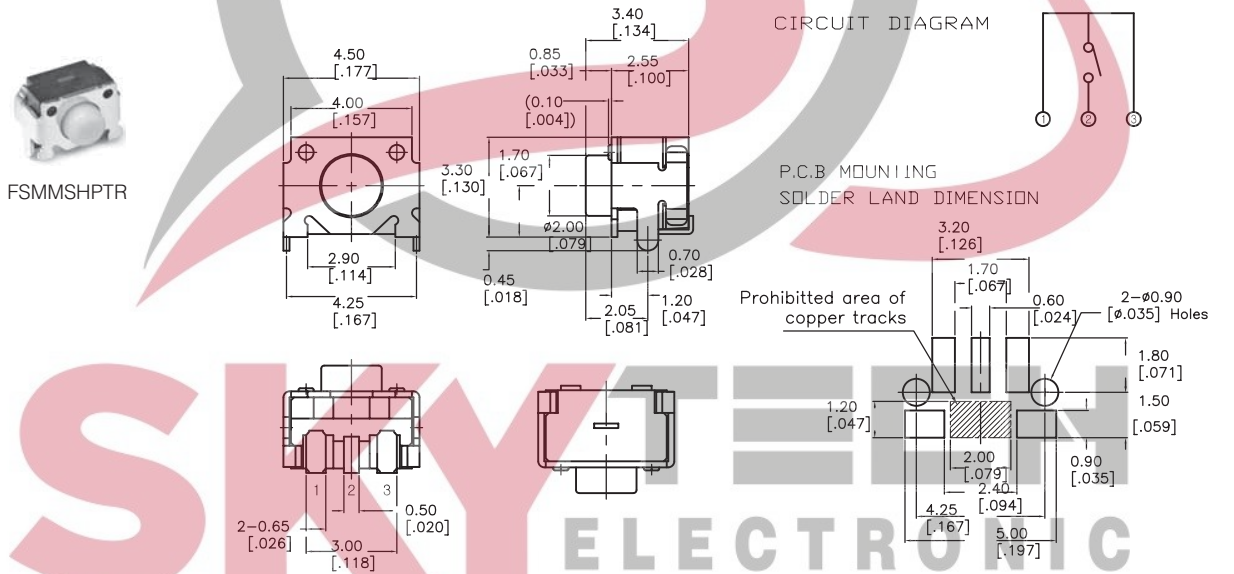
Tactile Switches

Location pins

**blank** no location pins



**P** with location pins



Product key	Location pins	Actuation force	Packaging	Part Number
<b>FSMMSHPTR</b>	with pins	1.6±.5 N (160±50 gf)	tape & reel	<b>1977066-1</b>
<b>FSMMSHTR</b>	no pins			<b>1977067-1</b>

Preferred parts in bold print

**FSMMS Series 3 x 5 Miniature Side Action, SMT**

**Features**

- Gullwing and J-lead surface mounting
- Tape & reel packaging
- Low profile of 1.60 mm



**Typical performance characteristics**

Contact configuration	.....	SPST
Contact rating max.	.....	50 mA @ 24 VDC
Contact rating min.	.....	10 $\mu$ A @ 1 VDC
Electrical life	.....	100,000 cycles
Mechanical life	.....	100,000 cycles
Contact resistance	.....	max 100 mOhm
Insulation resistance	.....	min 100 MOhm
Dielectric strength	.....	500 VAC for 1 min
Actuation force	.....	2.2 to 2.5 N (220 to 250 gf)
Actuator travel	.....	0.30 mm (.012) average

**Environmental specification**

Operating temperature	.....	-35 to +105°C
Storage temperature	.....	-35 to +105°C
Solder heat resistance	.....	260°C/10s reflow

**Material specifications**

Contacts	.....	stainless steel silver finish
Actuator	.....	46 nylon or lcp
Terminals	.....	copper alloy silver finish
Base	.....	nylon 6T or lcp
Cover	.....	stainless steel
RoHS Directive 2002/95/EC	.....	compliant

**Product key**

Typical product key

**FSM 3 MS SM A P TR**

**Type**

**FSM** Side action tactile switch, 3 x 5 mm

**Actuator length**

<b>1</b>	3.55 mm (.140)	<b>3</b>	4.50 mm (.177)
<b>2</b>	4.40 mm (.173)		

**Version**

**MS** standard

**Terminal**

**SM** surface mount - SMT      **JM** J-lead surface mount - SMT

**Actuation force**

**blank** 2.2 $\pm$ .8 N (220 $\pm$ 80 gf)      **A** 2.5 $\pm$ .5 N (250 $\pm$ 50 gf)

**Location pins**

**blank** no pins      **P** with pins

**Packaging**

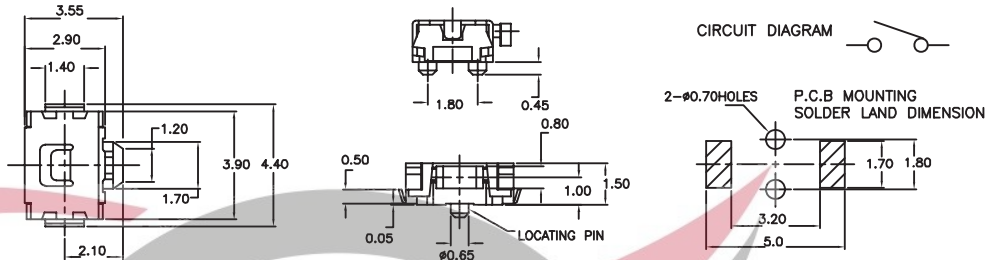
**TR** tape & reel

**FSMMS Series 3 x 5 Miniature Side Action, SMT (Continued)**

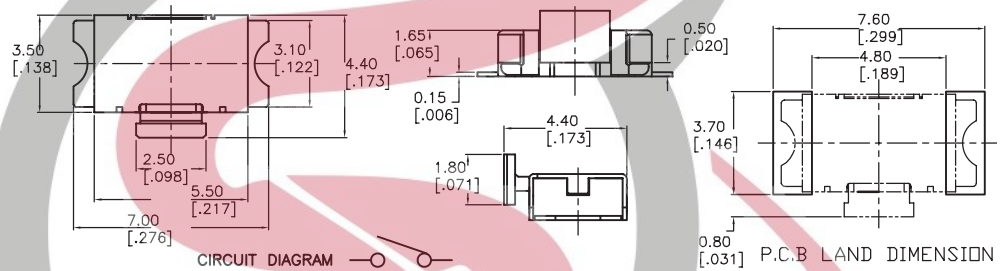
Actuator length, Terminal



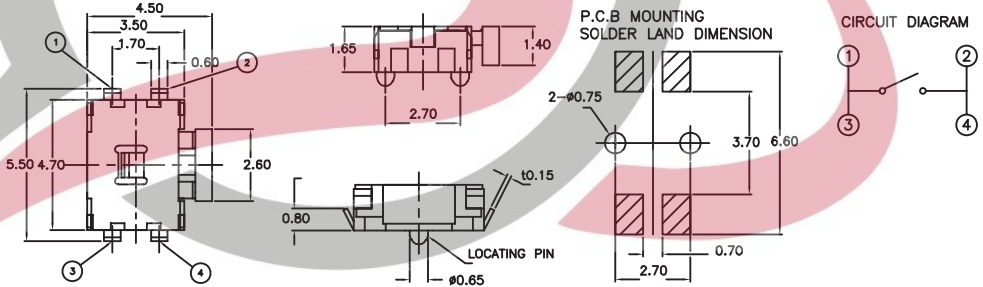
**1 actuator length 3.55 mm, J-lead surface mount - SMT**



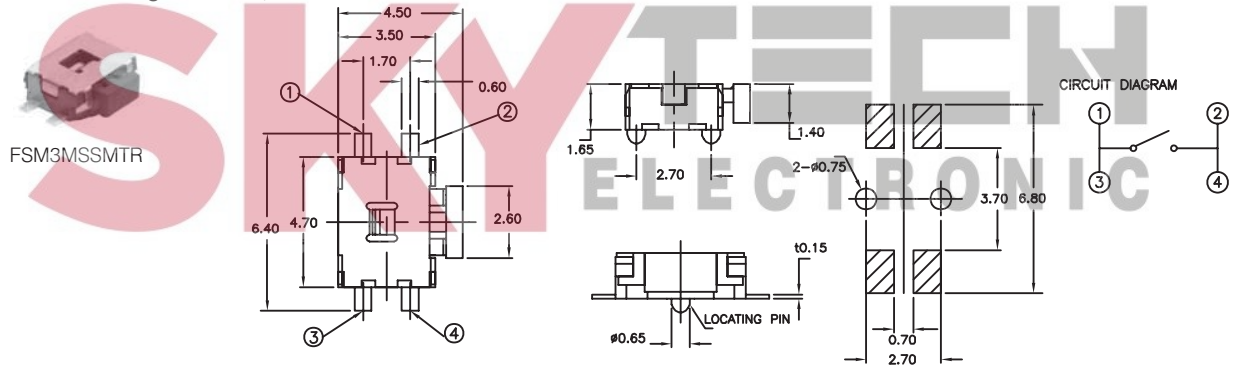
**2 actuator length 4.40 mm, J-lead surface mount - SMT**



**3 actuator length 4.50 mm, J-lead surface mount - SMT**



**3 actuator length 4.50 mm, surface mount - SMT**



Product key	Actuator length	Terminal	Actuation force	Location pin	Packaging	Part Number
<b>FSM1MSJMPTR</b>	3.55 mm	J-Lead	2.2±.8 N (220±80 gf)	yes	tape & reel	<b>1571908-1</b>
<b>FSM1MSJMTR</b>	(.140)	SMT		no		<b>1571908-2</b>
<b>FSM2MSSMATR</b>	4.40 mm (.173)	Gullwing, SMT	2.5±.5 N (250±50 gf)			1571895-1
<b>FSM3MSJMPTR</b>	4.50 mm	J-Lead	2.2±.8 N (220±80 gf)	yes		<b>1571910-1</b>
<b>FSM3MSJMTR</b>	(.177)	SMT		no		<b>1571910-2</b>
<b>FSM3MSSMPTR</b>		Gullwing		yes		<b>1571909-1</b>
<b>FSM3MSSMTR</b>		SMT		no		<b>1571909-2</b>

Preferred parts in bold print

**FSMMST Series "Turtle" Style, SMT**

**Features**

- Tape & reel packaging
- Low profile of 1.70 mm



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24 VDC
Contact rating min.	10 $\mu$ A @ 1 VDC
Electrical life	100,000 cycles
Mechanical life	100,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	500 VAC for 1 min
Actuation force	2.2 N (220 gf)
Actuator travel	0.25 mm (.010) average

**Environmental specification**

Operating temperature	-20 to +70°C
Storage temperature	-30 to +80°C
Solder heat resistance	260°C/10s reflow

**Material specifications**

Contacts	stainless steel silver finish
Actuator	lcp
Terminals	copper alloy silver finish
Base	lcp
Cover	stainless steel
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

<b>FSM</b>	<b>MST</b>	<b>TR</b>
------------	------------	-----------

**Type**

**FSM** Turtle style tactile switch, SMT

**Version**

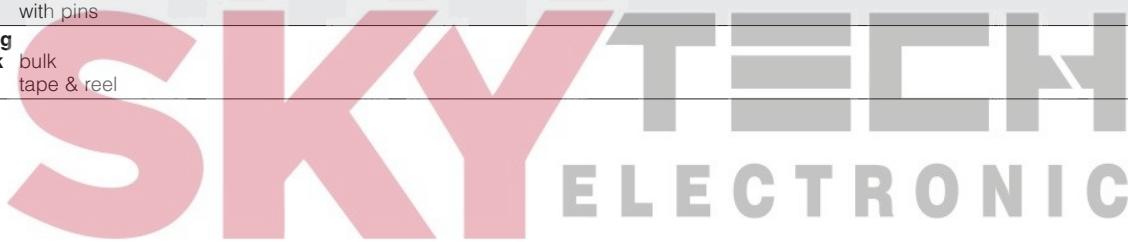
**MST** standard

**Location pins**

**blank** no pins  
**P** with pins

**Packaging**

**blank** bulk  
**TR** tape & reel

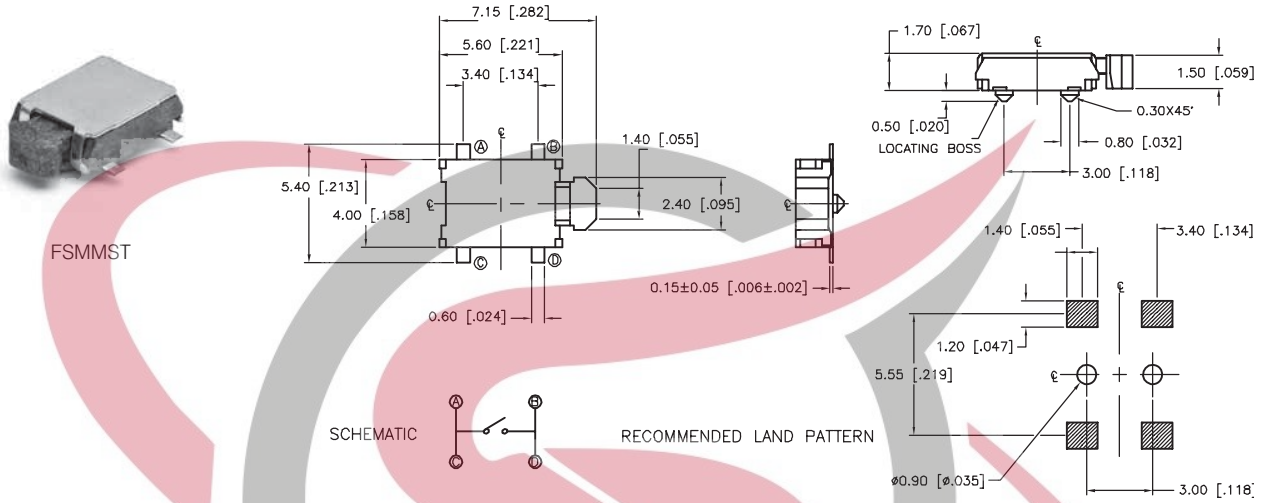


**FSMMST Series "Turtle" Style, SMT (Continued)**

FSMMST Series



Tactile Switches



Product key	Version	Actuation force	Location pins	Packaging	Part Number
<b>FSMMST</b>	standard	2.2±.8 N (220±80 gf)	no pins	bulk	<b>1571262-1</b>
FSMMSTP			with pins		1571262-3
FSMMSTPTR				tape & reel	1571262-4
<b>FSMMSTTR</b>			no pins		<b>1571262-2</b>

Preferred parts in bold print



**FSMMDS Series 7.5 x 7.5 Multidirectional, SMT**

**Features**

- Multi direction actuation



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	50 mA @ 24 VDC
Contact rating min.	10 $\mu$ A @ 1 VDC
Electrical life	200,000 cycles
Mechanical life	200,000 cycles
Contact resistance	max 500 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	100 VAC for 1 min
Actuation force	3.2 N (320 gf) center, 1.6 N (160 gf) side
Actuator travel	0.15 mm (.006) center, 2.0 (.008) side

**Environmental specification**

Operating temperature	-30 to +85°C
Storage temperature	-40 to +85°C
Solder heat resistance	260°C/10s reflow

**Material specifications**

Contacts	stainless steel silver finish
Actuator	lcp
Terminals	copper alloy silver finish
Base	nylon
Cover	stainless steel
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM MDS P**

<b>Type</b>	
<b>FSM</b>	Multidirectional tactile switch, 7.5 mm, SMT
<b>Version</b>	
<b>MDS</b>	standard
<b>Location pins</b>	
<b>blank</b>	no pins
<b>P</b>	with pins



**FSMMDS Series 7.5 x 7.5 Multidirectional, SMT (Continued)**

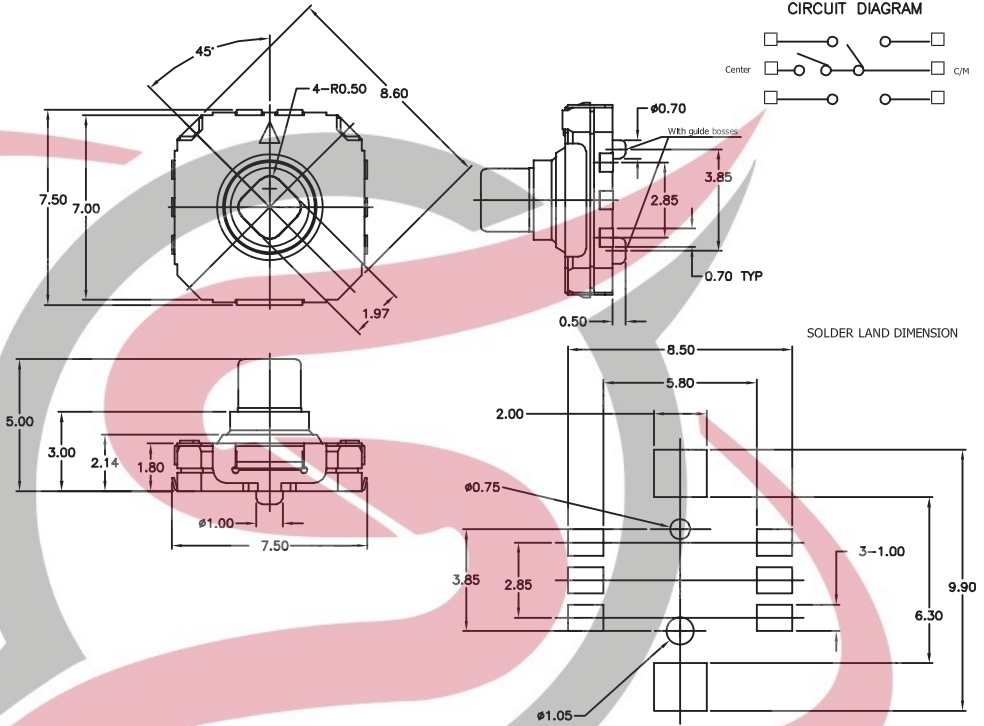
Version



MDS standard version, without and with location pins



FSMMDS



Product key	Version	Location pins	Part Number
FSMMDS	standard	no pins	1825446-1
FSMMDSP		with pins	1825446-2





**FSM . MD Series 12 x 12 Multidirectional, THT & SMT**

**Features**

- Multi direction actuation
- Through hole and surface mount option



**Typical performance characteristics**

Contact configuration	SPST
Contact rating max.	5 mA @ 24 VDC
Contact rating min.	10 μA @ 1 VDC
Electrical life	50,000 cycles
Mechanical life	50,000 cycles
Contact resistance	max 100 mOhm
Insulation resistance	min 100 MOhm
Dielectric strength	100 VAC for 1 min
Actuation force	3.5 to 8.0 N (350 to 800 gf) center 2.0N (200 gf) side
Actuator travel	THT: 0.25 mm (.010) center, 5° side SMT: 1.0 mm (.040) center, 8° side

**Environmental specification**

Operating temperature	-35 to +85°C
Storage temperature	-35 to +85°C
Solder heat resistance	260°C/10s reflow or 265°C/10s wave

**Material specifications**

Contacts	stainless steel or copper alloy silver finish
Actuator	pbt or nylon
Terminals	copper alloy silver finish
Base	nylon
Cover	stainless steel or pet film
RoHS Directive 2002/95/EC	compliant

**Product key**

Typical product key

**FSM 3 MD SM A**

**Type**

**FSM** 12 mm Multidirectional Tactile Switch

**Actuator length**

	THT		SMT
<b>1</b>	10.0 mm (.394)	<b>2</b>	10.5 mm (.413)
<b>4</b>	14.0 mm (.551)	<b>3</b>	12.2 mm (.480)
		<b>5</b>	14.2 mm (.559)

**Version**

**MD** standard

**Terminal**

**blank** through hole - THT  
**SM** surface mount - SMT

**Actuation force**

**blank** 3.5 +1.0/-0.5 N (350 +100/-50 gf)  
**A** 5.0±1.5 N (500±150 gf)  
**AA** 8.0±1.0 N (800±100 gf)

**FSM . MD Series 12 x 12 Multidirectional, THT & SMT (Continued)**

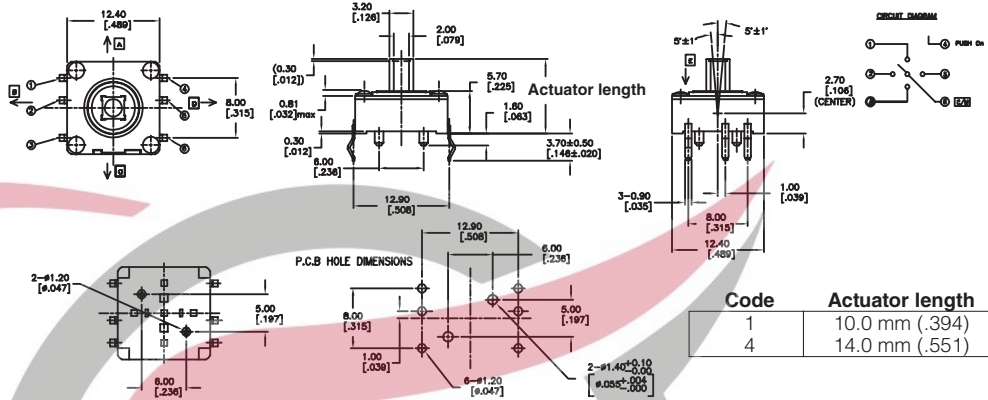
**Terminal**



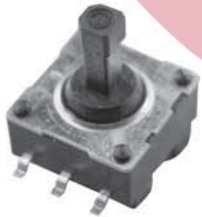
**blank through hole - THT**



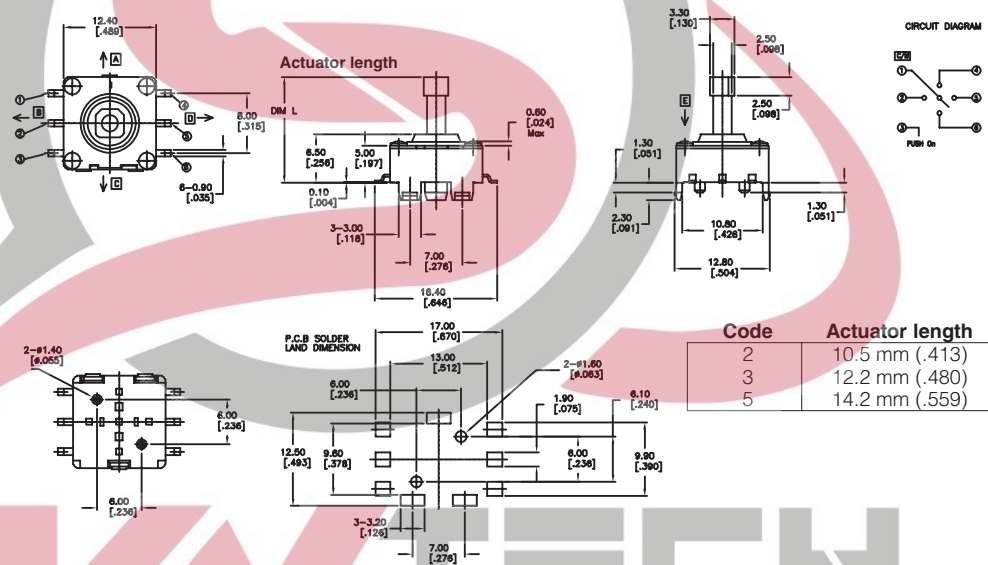
FSM1MD



**SM surface mount - SMT**



FSM5MDSMA



Product key	Actuator length	Version	Terminal	Actuation force	Part Number
FSM1MD	10.0 mm (.394)	standard	THT	3.5 N (350 gf)	1571515-1
FSM2MDSMA	10.5 mm (.413)		SMT	5.0±1.5 N (500±150 gf)	1571514-3
FSM3MDSMA	12.2 mm (.480)				1571514-2
FSM4MDAA	14.0 mm (.551)		THT	8.0±1.0 N (800±100 gf)	1571515-2
FSM5MDSMA	14.2 mm (.559)		SMT	5.0±1.5 N (500±150 gf)	1571514-1