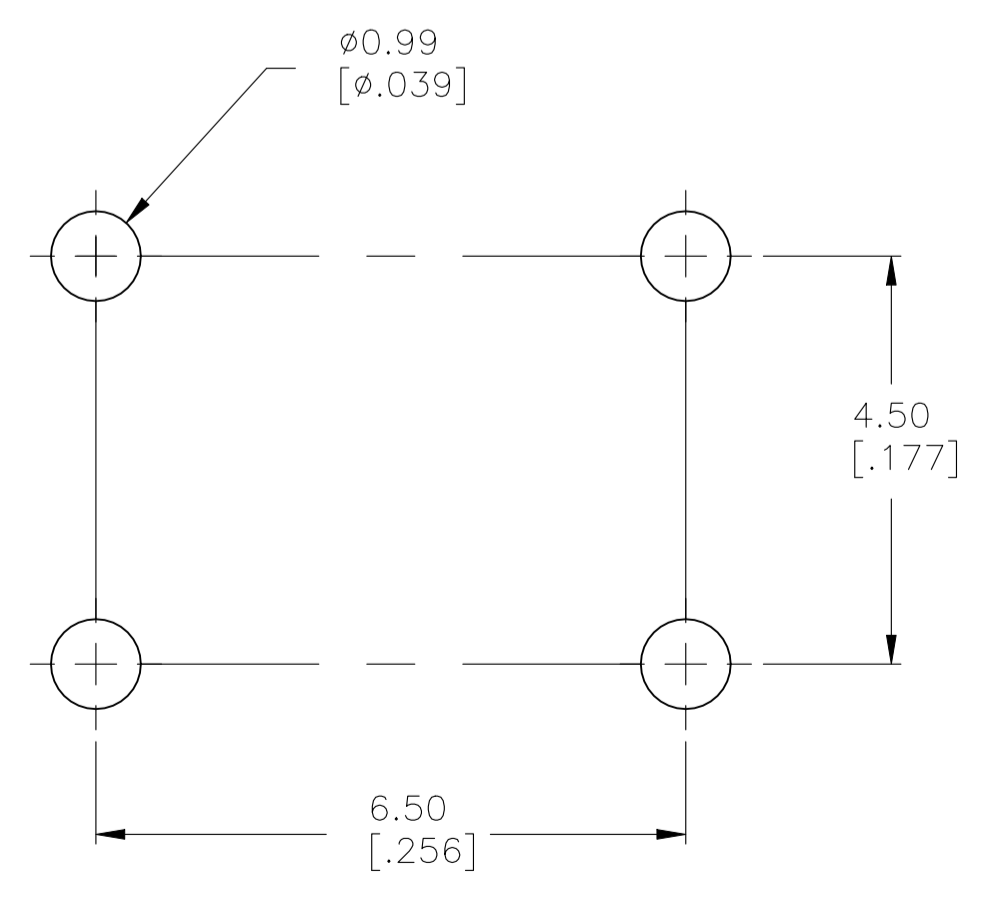
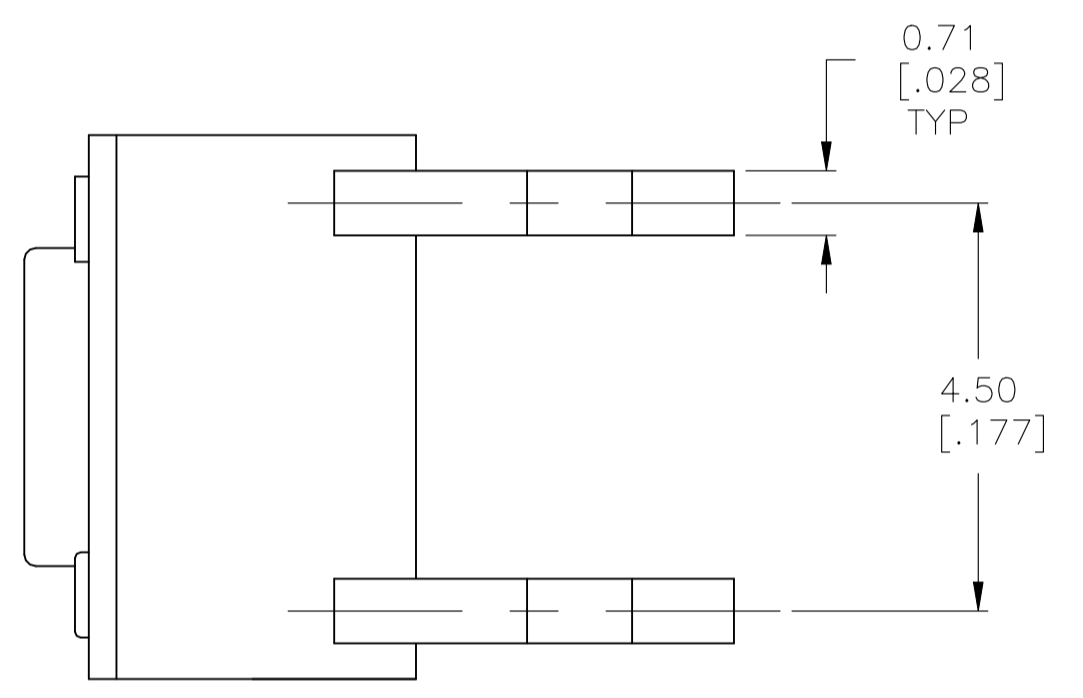


VIEW A-A  
FSM6J THRU FSM18J



RECOMMENDED HOLE LAYOUT  
TOLERANCE ±0.05[.002] UNLESS OTHERWISE NOTED

| CIRCUIT CHARACTERISTICS |                 |  |
|-------------------------|-----------------|--|
| CONTACT POSITION        | CIRCUIT DIAGRAM |  |
| OFF                     |                 |  |
| (ON)<br>1-3<br>2-4      |                 |  |

SPECIFICATIONS:

MATERIALS:  
CASE: PA66 UL94HB  
ACTUATOR: PA66 UL94HB, SEE P/N TABLE  
COVER: PET.  
MOVING CONTACT: STAINLESS STEELAg clad  
FIXED CONTACT/TERMINAL: BRASS Ag Plating

ELECTRICAL:

MAX CONTACT RATING: 50 MILLIAMPS@24V DC (FSM14JHS/FSM16JLHS: 50 MILLIAMPS@12V DC).  
MIN CONTACT RATING: 10 MICROAMPS@1V DC (FSM14JHS/FSM16JLHS: 10 MILLIAMPS@5V DC).  
INITIAL CONTACT RESISTANCE: 100 MILLIOHM MAX. (FSM14JHS/FSM16JLHS: 50 MILLIOHM MAX.)  
INSULATION RESISTANCE: 100 MEGAOHM MIN. @100V DC.  
DIELECTRIC STRENGTH: 500V AC FOR 1 MINUTE (FSM14JHS/FSM16JLHS:250V AC).  
LIFE EXPECTANCY: 100,000 CYCLES MIN. ( 2CYCLES PER SECOND THE 150% ACTUATION FORCE).  
EXCEPT FOR THE 520GF MODEL WHICH WOULD BE 50,000 CYCLES MIN.

MECHANICAL:

ACTUATION FORCE: SEE TABLE  
ACTUATION TRAVEL: 0.010<sup>+0.008</sup>/<sub>0.004</sub> (FSM14JHS/FSM16JLHS:0.25±0.1mm)

ENVIRONMENTAL:

OPERATING TEMPERATURE: -40°C TO +105°C (FSM14JHS/FSM16JLHS: -20 TO +70°C)  
STORAGE TEMPERATURE: -40°C TO +105°C (FSM14JHS/FSM16JLHS: -30 TO +80°C)  
THERMAL SHOCK: PER EIA-364-32C,-35 TO +85°C (FSM14JHS/FSM16JLHS: -10 TO +65°C)  
RESISTANCE TO SOLDER HEAT: PER 109-202, CONDITION B (FSM14JHS/FSM16JLHS: 260°C,10 sec max)  
SOLDERABILITY: PER EIA-364-52, CLASS2, CATEGORY 1,CATEGORY 2, 95% MINIMUM COVERAGE  
(SOLDERABILITY ONLY FOR FSM14JHS/FSM16JLHS):  
automatic:- Preheat: 150°C-175°C, 40-80sec  
Peak temp:260°C max,  
Soldering area temp: 260c,1-4sec, 2 times max  
Manual-Soldering temp: less than 350°c, within 3 sec

NOTES:

- ALL MATERIALS AND FINISHES SHALL COMPLY WITH EU DIRECTIVE 2002/95/EC OF 27JAN2003 (ROHS)
- A REINFORCE COLLAR IS RECOMENDED FOR APPLICATIONS WITH INCREASED AXIAL LOAD. PLEASE REFERENCE FIGURE

| ACTUATOR MAT'L | ACTUATOR COLOR | ACTUATION FORCE | DIM C         | DIM B        | DIM A        | ALCO P/N     | P/N         |             |
|----------------|----------------|-----------------|---------------|--------------|--------------|--------------|-------------|-------------|
| PA66           | BLACK          | 160 +/-50 GF    | See page #2   | 13.5 (0.531) | 6 (0.236)    | FSM16JLHS    | 4-1825910-2 |             |
| PA66           | BLACK          | 160 +/-50 GF    | See page #2   | 9.5 (0.374)  | 2 (0.079)    | FSM14JHS     | 4-1825910-1 |             |
| NYLON 6/6      | BROWN          | 100 +/-50 GF    | 3.30 (.130)   | 7.00 (.276)  | 3.40 (.134)  | FSM6JLHTB    | 3-1825910-9 |             |
| OBSOLETE       | PBT            | BROWN           | N/A           | 5.00 (.196)  | 1.40 (.055)  | FSM4JLHTB    | 3-1825910-8 |             |
| OBSOLETE       | NYLON 6/6      | YELLOW          | 520 +/-100 GF | 3.09 (.122)  | 8.50 (.335)  | 4.90 (.193)  | FSM18JAAH   | 3-1825910-7 |
| OBSOLETE       | NYLON 6/6      | RED             | 260 +/-50 GF  | 3.09 (.122)  | 8.50 (.335)  | 4.90 (.193)  | FSM18JAH    | 3-1825910-6 |
| OBSOLETE       | NYLON 6/6      | BLACK           | 160 +/-50 GF  | 3.09 (.122)  | 8.50 (.335)  | 4.90 (.193)  | FSM18JH     | 3-1825910-5 |
| OBSOLETE       | NYLON 6/6      | BROWN           | 100 +/-50 GF  | 3.09 (.122)  | 8.50 (.335)  | 4.90 (.193)  | FSM18JLH    | 3-1825910-4 |
| NYLON 6/6      | YELLOW         | 520 +/-100 GF   | 2.80 (.110)   | 17.00 (.669) | 13.40 (.527) | FSM16JAAH    | 3-1825910-3 |             |
| NYLON 6/6      | RED            | 260 +/-50 GF    | 2.80 (.110)   | 17.00 (.669) | 13.40 (.527) | FSM16JAH     | 3-1825910-2 |             |
| NYLON 6/6      | BLACK          | 160 +/-50 GF    | 2.80 (.110)   | 17.00 (.669) | 13.40 (.527) | FSM16JH      | 3-1825910-1 |             |
| OBSOLETE       | NYLON 6/6      | BROWN           | 100 +/-50 GF  | 2.80 (.110)  | 17.00 (.669) | 13.40 (.527) | FSM16JLH    | 3-1825910-0 |
| NYLON 6/6      | YELLOW         | 520 +/-100 GF   | 2.87 (.113)   | 13.00 (.512) | 9.40 (.370)  | FSM14JAAH    | 2-1825910-9 |             |
| NYLON 6/6      | RED            | 260 +/-50 GF    | 2.87 (.113)   | 13.00 (.512) | 9.40 (.370)  | FSM14JAH     | 2-1825910-8 |             |
| NYLON 6/6      | BLACK          | 160 +/-50 GF    | 2.87 (.113)   | 13.00 (.512) | 9.40 (.370)  | FSM14JH      | 2-1825910-7 |             |
| NYLON 6/6      | BROWN          | 100 +/-50 GF    | 2.87 (.113)   | 13.00 (.512) | 9.40 (.370)  | FSM14JLH     | 2-1825910-6 |             |
| OBSOLETE       | NYLON 6/6      | YELLOW          | 520 +/-100 GF | 3.20 (.126)  | 8.00 (.315)  | 4.40 (.173)  | FSM12JAAH   | 2-1825910-5 |
| OBSOLETE       | NYLON 6/6      | BLACK           | 260 +/-50 GF  | 3.20 (.126)  | 8.00 (.315)  | 4.40 (.173)  | FSM12JABH   | 2-1825910-4 |
| OBSOLETE       | NYLON 6/6      | RED             | 260 +/-50 GF  | 3.20 (.126)  | 8.00 (.315)  | 4.40 (.173)  | FSM12JAH    | 2-1825910-3 |
| NYLON 6/6      | WHITE          | 160 +/-50 GF    | 3.20 (.126)   | 8.00 (.315)  | 4.40 (.173)  | FSM12JH      | 2-1825910-2 |             |
| OBSOLETE       | NYLON 6/6      | BROWN           | 100 +/-50 GF  | 3.20 (.126)  | 8.00 (.315)  | 4.40 (.173)  | FSM12JLH    | 2-1825910-1 |
| OBSOLETE       | NYLON 6/6      | YELLOW          | 520 +/-100 GF | 3.25 (.128)  | 7.30 (.287)  | 3.70 (.146)  | FSM10JAAH   | 2-1825910-0 |
| NYLON 6/6      | RED            | 260 +/-50 GF    | 3.25 (.128)   | 7.30 (.287)  | 3.70 (.146)  | FSM10JAH     | 1-1825910-9 |             |
| NYLON 6/6      | IVORY          | 160 +/-50 GF    | 3.25 (.128)   | 7.30 (.287)  | 3.70 (.146)  | FSM10JH      | 1-1825910-8 |             |
| OBSOLETE       | NYLON 6/6      | BROWN           | 100 +/-50 GF  | 3.25 (.128)  | 7.30 (.287)  | 3.70 (.146)  | FSM10JLH    | 1-1825910-7 |
| OBSOLETE       | PBT            | YELLOW          | 520 +/-100 GF | 3.10 (.122)  | 9.50 (.374)  | 5.90 (.232)  | FSM8JAAH    | 1-1825910-6 |
| PBT            | RED            | 260 +/-50 GF    | 3.10 (.122)   | 9.50 (.374)  | 5.90 (.232)  | FSM8JAH      | 1-1825910-5 |             |
| PBT            | BLACK          | 160 +/-50 GF    | 3.10 (.122)   | 9.50 (.374)  | 5.90 (.232)  | FSM8JH       | 1-1825910-4 |             |
| PBT            | BROWN          | 100 +/-50 GF    | 3.10 (.122)   | 9.50 (.374)  | 5.90 (.232)  | FSM8JLH      | 1-1825910-3 |             |
| NYLON 6/6      | YELLOW         | 520 +/-100 GF   | 3.30 (.130)   | 7.00 (.276)  | 3.40 (.134)  | FSM6JAAH     | 1-1825910-2 |             |
| NYLON 6/6      | RED            | 260 +/-50 GF    | 3.30 (.130)   | 7.00 (.276)  | 3.40 (.134)  | FSM6JAH      | 1-1825910-1 |             |
| NYLON 6/6      | BLUE           | 160 +/-50 GF    | 3.30 (.130)   | 7.00 (.276)  | 3.40 (.134)  | FSM6JH       | 1-1825910-0 |             |
| NYLON 6/6      | BROWN          | 100 +/-50 GF    | 3.30 (.130)   | 7.00 (.276)  | 3.40 (.134)  | FSM6JLH      | 1825910-9   |             |
| PBT            | YELLOW         | 520 +/-100 GF   | N/A           | 5.00 (.196)  | 1.40 (.055)  | FSM4JAAH     | 1825910-8   |             |
| PBT            | RED            | 260 +/-50 GF    | N/A           | 5.00 (.196)  | 1.40 (.055)  | FSM4JAH      | 1825910-7   |             |
| PBT            | BLACK          | 160 +/-50 GF    | N/A           | 5.00 (.196)  | 1.40 (.055)  | FSM4JH       | 1825910-6   |             |
| OBSOLETE       | PBT            | BROWN           | 100 +/-50 GF  | N/A          | 5.00 (.196)  | 1.40 (.055)  | FSM4JLH     | 1825910-5   |
| OBSOLETE       | PBT            | YELLOW          | 520 +/-100 GF | N/A          | 4.30 (.169)  | 0.70 (.028)  | FSM2JAAH    | 1825910-4   |
| PBT            | RED            | 260 +/-50 GF    | N/A           | 4.30 (.169)  | 0.70 (.028)  | FSM2JAH      | 1825910-3   |             |
| PBT            | NATURAL        | 160 +/-50 GF    | N/A           | 4.30 (.169)  | 0.70 (.028)  | FSM2JH       | 1825910-2   |             |
| PBT            | BROWN          | 100 +/-50 GF    | N/A           | 4.30 (.169)  | 0.70 (.028)  | FSM2JLH      | 1825910-1   |             |

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm [INCHES]

TOLERANCES UNLESS OTHERWISE SPECIFIED:

|        |                |
|--------|----------------|
| 0. PLC | ± .01          |
| 1. PLC | ± .01          |
| 2. PLC | ± .01          |
| 3. PLC | ± 0.30 [0.012] |
| 4. PLC | ± .01          |
| ANGLES | ± .01          |

MATERIAL: SEE SPECIFICATIONS

FINISH: -

APPROVED: M. SARVER

DATE: 07NOV06

TE Connectivity

6MM TACT SWITCH, THRU-HOLE HIGH TEMP

SIZE: A1

SCALE: 12:1

SHEET: 1 OF 2

REV: D



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