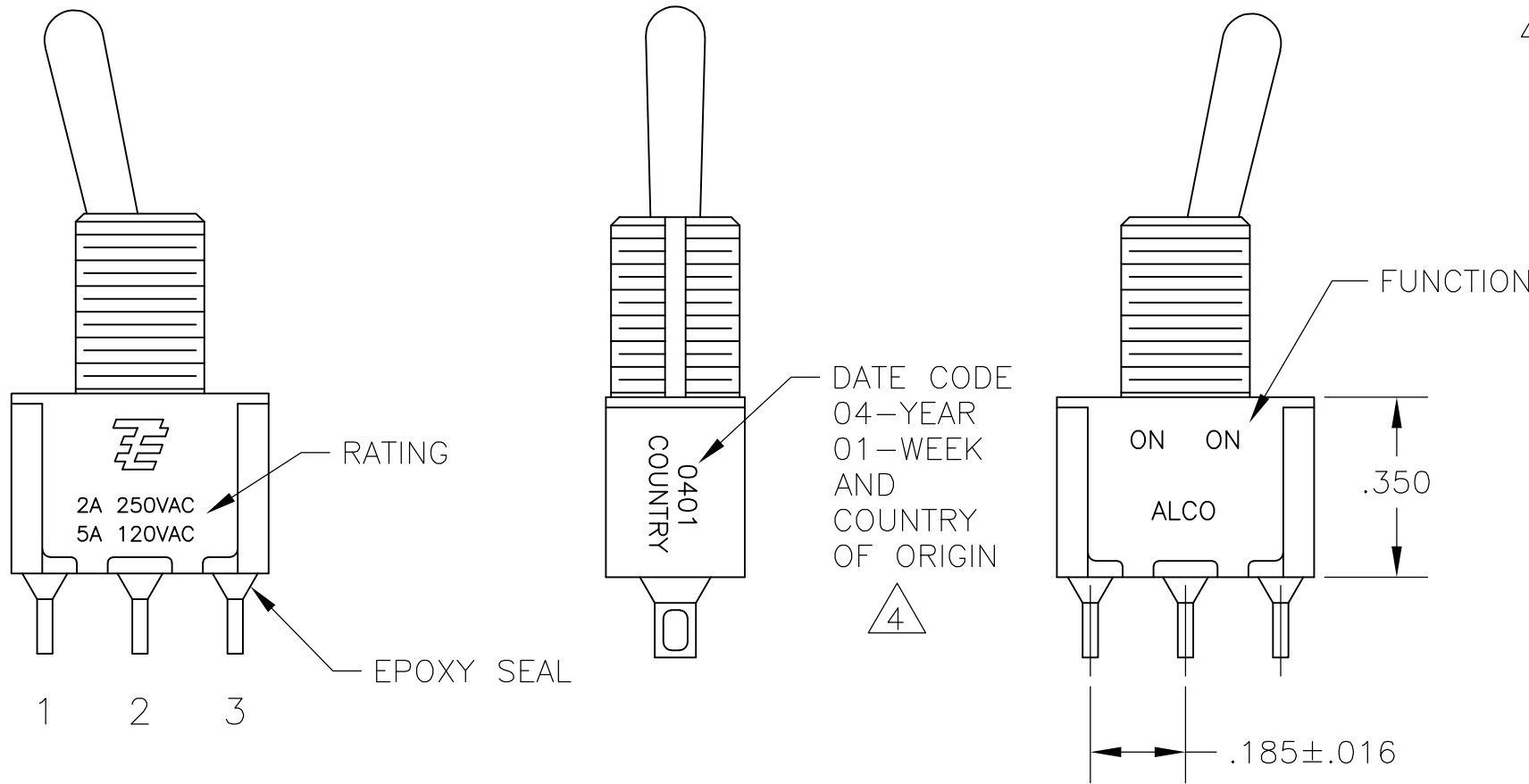
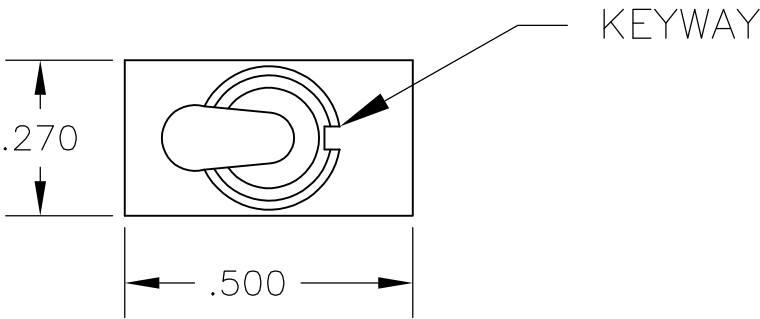


| LOC | DIST | REVISIONS |     |                           |           |     |      |
|-----|------|-----------|-----|---------------------------|-----------|-----|------|
|     |      | P         | LTR | DESCRIPTION               | DATE      | DWN | APVD |
| AD  | 00   |           | A7  | REVISED PER ECO-14-005988 | 23APR2014 | NK  | RH   |

- 1
- ALL MATERIALS AND FINISHES SHALL COMPLY WITH EU DIRECTIVE 2002/95/EC OF 27JAN2003 (ROHS).
- 2
- EACH SWITCH WITH THREADED BUSHINGS SUPPLIED WITH THE FOLLWING MOUNTING HARDWARE:  
(2) HEX NUTS  
(1) INTERNAL TOOTH LOCKWASHER  
(1) LOCATING RING
- 3
- G CONTACT OPTION CAN BE USED FOR SIGNAL OR POWER LEVEL SWITCHING. IF SWITCH IS USED AT LEVELS EXCEEDING .4VA @ 20V AC/DC, SWITCH IS RENDERED FOR POWER SWITCHING ONLY DUE TO ARC REMOVAL OF GOLD PLATING. RATING MARKED ON FRAME IS 2A 250VAC, 5A 120VAC.
- 4
- DATE CODE AND COUNTRY OF ORIGIN MAY APPEAR ON EITHER SIDE OF SWITCH.
- 5
- LENGTH OF TOGGLE REDUCED BY .020 WITH A, AV2, V30 OR V40 VERTICAL SUPPORT BRACKET OPTIONS.
- 6
- ALL LOGO, RATING, DATE CODE, AND FUNCTION MARKINGS TO BE LASER MARKED.



| SPECIFICATIONS CHART            |                                                                  |
|---------------------------------|------------------------------------------------------------------|
| RATING, B CONTACTS              | .4VA MAX @20V MAX. AC OR DC                                      |
| RATING, G CONTACTS—SEE NOTE 3   | .4VA MAX @20V MAX. AC OR DC OR 5A @120 VAC OR 28 VDC (RESISTIVE) |
|                                 | 2A @250 VAC (RESISTIVE)                                          |
| RATING, Q CONTACTS              | 5A @120 VAC OR 28 VDC (RESISTIVE)                                |
|                                 | 2A @250 VAC (RESISTIVE)                                          |
| ELECTRICAL LIFE                 | 6,000 CYCLES AT RATED LOAD                                       |
| CONTACT RESISTANCE              | 10 MILLIOHMS MAX INITIAL @ 2–4VDC, 100ma                         |
| INSULATION RESISTANCE           | 1,000 MEGOHMS MIN                                                |
| DIELECTRIC WITHSTANDING VOLTAGE | 1,000 V RMS AT SEA LEVEL                                         |
| OPERATING TEMPRATURE            | –30C TO 85C                                                      |

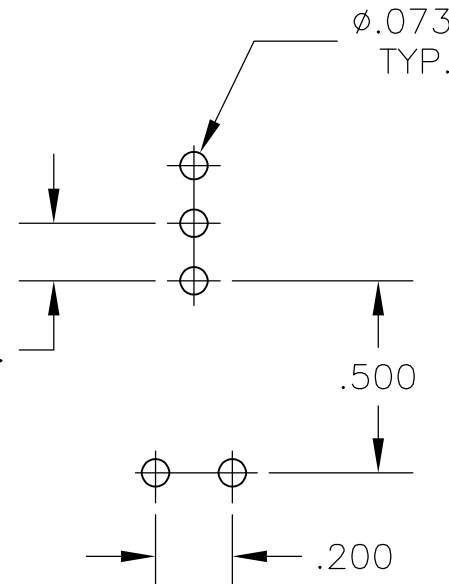
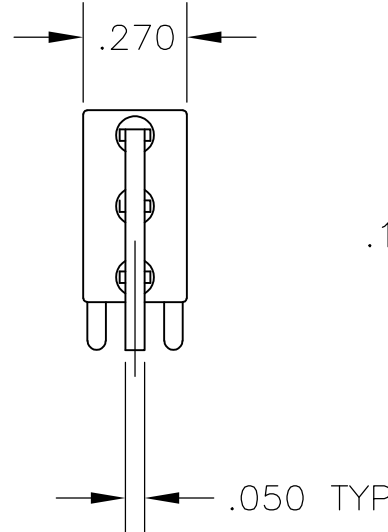
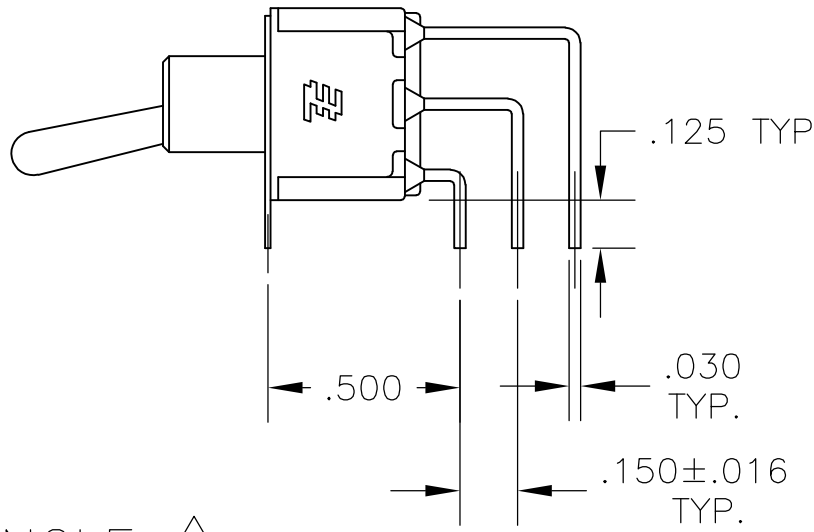
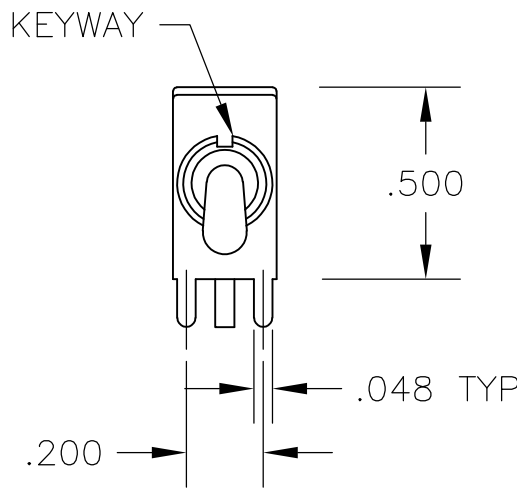
| FUNCTION CHART                                                                                                   |       |       |       |
|------------------------------------------------------------------------------------------------------------------|-------|-------|-------|
| FUNCTION                                                                                                         | 1 2 3 | 1 2 3 | 1 2 3 |
| 03                                                                                                               | ON    | OFF   | ON    |
| 05                                                                                                               | (ON)  | OFF   | (ON)  |
| 07                                                                                                               | ON    | OFF   | (ON)  |
| TERMINALS CONNECTED                                                                                              | 2–3   | ---   | 1–2   |
| None: No mechanical position<br>Off: Mechanical position with no electrical connection<br>(On): Momentary action |       |       |       |

| PART NUMBER SEQUENCE CHART |          |        |         |          |         |      |
|----------------------------|----------|--------|---------|----------|---------|------|
| MODEL                      | FUNCTION | TOGGLE | BUSHING | TERMINAL | CONTACT | RoHS |
| A1                         | 03       | K      | CW      | A        | B       | 04   |
|                            | 05       | K1     | D       | AV2      | G       |      |
|                            | 07       | L      | D9      | C        | Q       |      |
| EXAMPLE: A103SYCQ04        |          | L1     | H       | V30      |         |      |
|                            |          | L2     | Y       | V40      |         |      |
|                            |          | M      | Y9      | W        |         |      |
|                            |          | P3     |         | W4       |         |      |
|                            |          | S      |         | Z        |         |      |
|                            |          | T      |         | Z3       |         |      |
|                            |          | T1     |         |          |         |      |

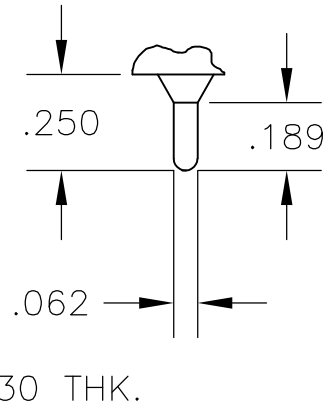
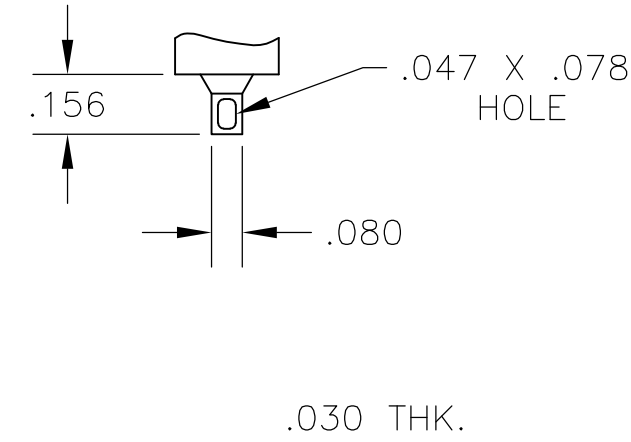
|                                                                                 |  |                  |         |                                                                                           |           |              |                 |
|---------------------------------------------------------------------------------|--|------------------|---------|-------------------------------------------------------------------------------------------|-----------|--------------|-----------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT.                                          |  | DWN<br>M. ZITTO  | 18MAY05 | TE Connectivity                                                                           |           |              |                 |
| DIMENSIONS:<br>INCHES                                                           |  | CHK<br>M. ZITTO  | -       |                                                                                           |           |              |                 |
|                                                                                 |  | APVD<br>M. ZITTO | -       | NAME<br>GEMINI A SERIES TOGGLE SWITCH, SINGLE POLE,<br>3 POSITION FUNCTIONS (03, 05 & 07) |           |              |                 |
|                                                                                 |  | PRODUCT SPEC     | -       |                                                                                           |           |              |                 |
| TOLERANCES UNLESS OTHERWISE SPECIFIED:                                          |  | APPLICATION SPEC | -       | SIZE                                                                                      | CAGE CODE | DRAWING NO   | RESTRICTED TO   |
| 0 PLC ± -<br>1 PLC ± -<br>2 PLC ± -<br>3 PLC ± .010<br>4 PLC ± -<br>ANGLES ± 2° |  | WEIGHT           | -       | A2                                                                                        | 00779     | C=1825137    | -               |
| MATERIAL<br>-                                                                   |  | FINISH<br>-      | -       | CUSTOMER DRAWING                                                                          |           | SCALE<br>3:1 | SHEET<br>1 of 4 |
|                                                                                 |  |                  |         |                                                                                           |           | REV<br>A7    |                 |



| LOC | DIST | REVISIONS |     |             |      |          |
|-----|------|-----------|-----|-------------|------|----------|
|     |      | P         | LTR | DESCRIPTION | DATE | DWN APVD |
| AD  | 00   | -         | -   | SEE SHEET 1 | -    | -        |



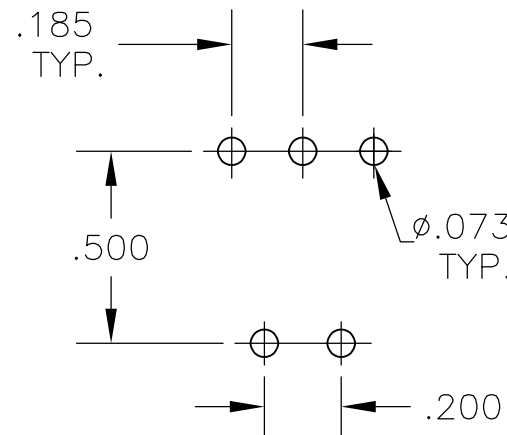
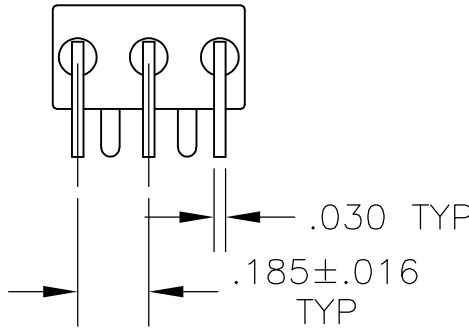
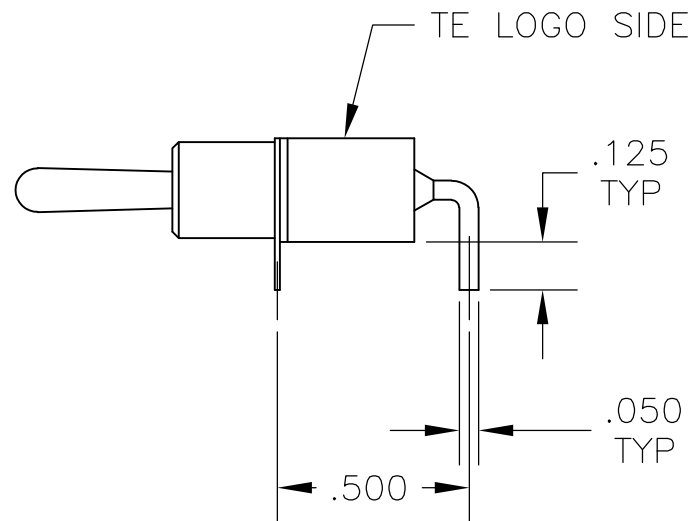
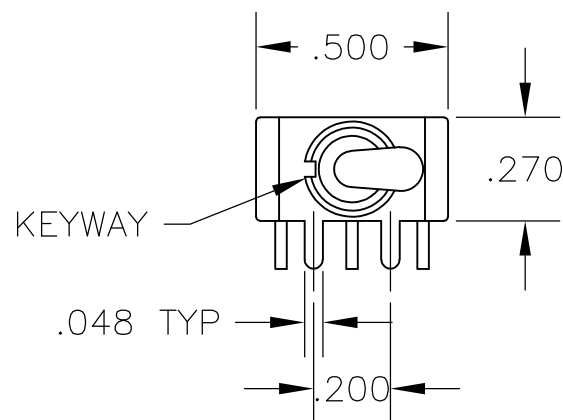
RECOMMENDED  
PCB LAYOUT



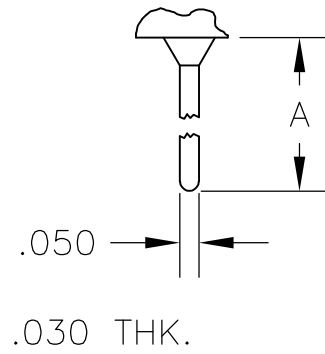
AV2 VERTICAL RIGHT ANGLE

Z WIRE LUG

Z3 QUICK CONNECT



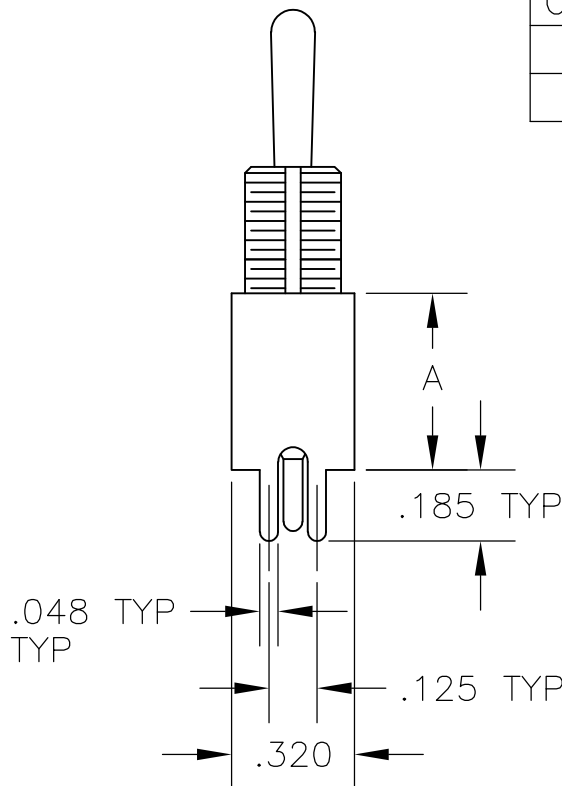
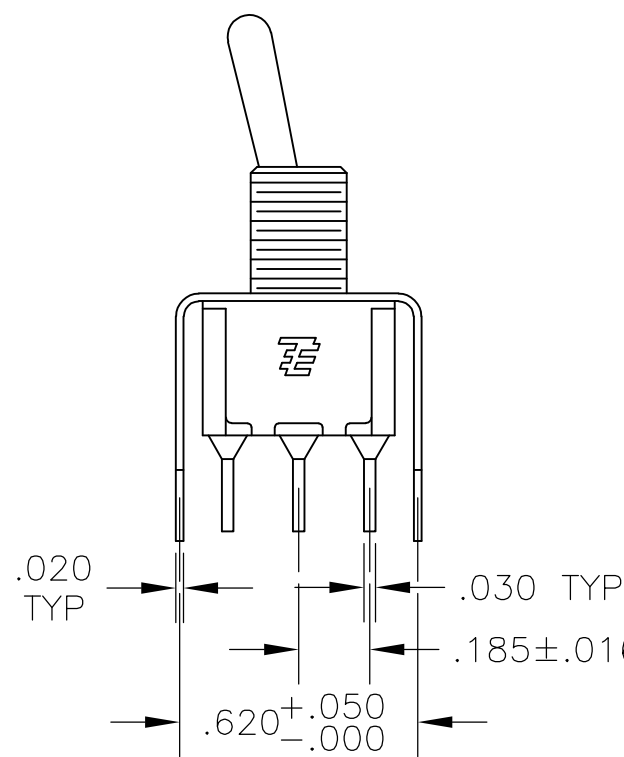
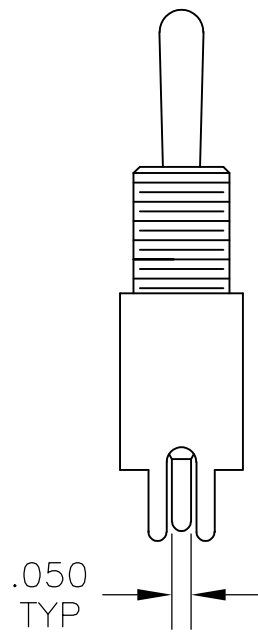
RECOMMENDED  
PCB LAYOUT



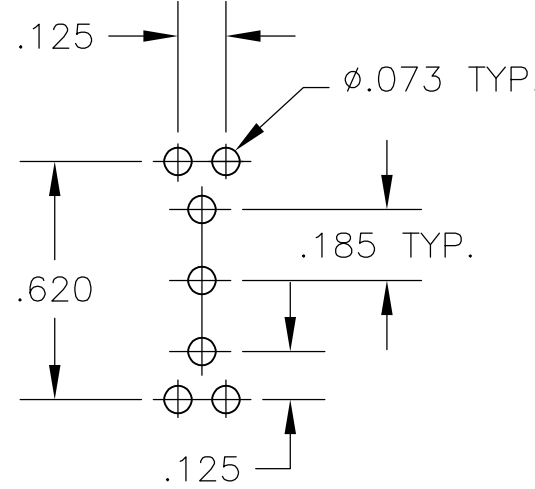
| OPTION | DIM A |
|--------|-------|
| W      | .736  |
| W4     | 1.062 |

A RIGHT ANGLE

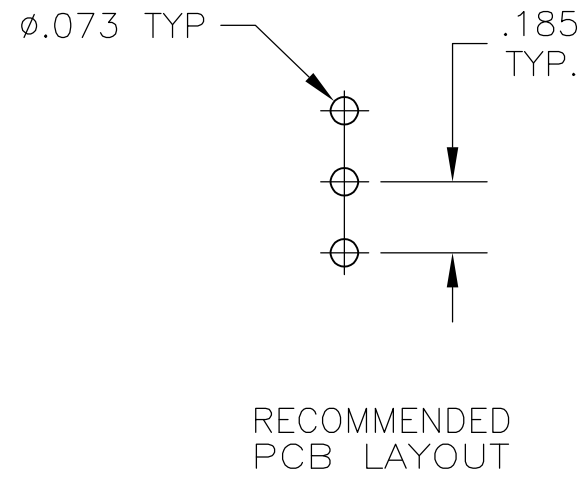
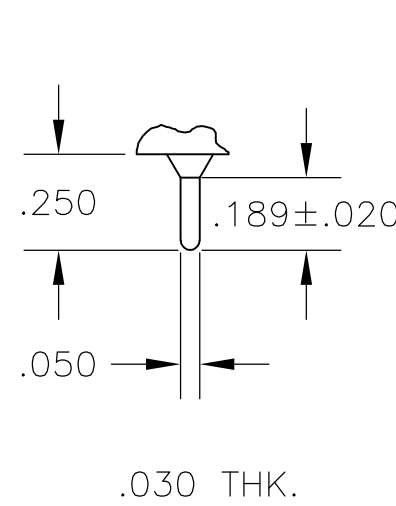
W W4 WIRE WRAP



| OPTION | DIM A |
|--------|-------|
| V30    | .460  |
| V40    | .630  |



RECOMMENDED  
PCB LAYOUT



V30 V40   
VERTICAL SUPPORT BRACKET

C PRINTED CIRCUIT

|                                        |  |                                                                                 |         |                                                                                        |  |
|----------------------------------------|--|---------------------------------------------------------------------------------|---------|----------------------------------------------------------------------------------------|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |  | DWN<br>M. ZITTO                                                                 | 18MAY05 | TE Connectivity                                                                        |  |
| DIMENSIONS:<br>INCHES                  |  | CHK<br>M. ZITTO                                                                 | -       |                                                                                        |  |
|                                        |  | TOLERANCES UNLESS OTHERWISE SPECIFIED:                                          |         | NAME<br>GEMINI A SERIES TOGGLE SWITCH, SINGLE POLE, 3 POSITION FUNCTIONS (03, 05 & 07) |  |
|                                        |  | 0 PLC ± -<br>1 PLC ± -<br>2 PLC ± -<br>3 PLC ± .010<br>4 PLC ± -<br>ANGLES ± 2° |         | APVD<br>M. ZITTO                                                                       |  |
| MATERIAL<br>-                          |  | FINISH<br>-                                                                     |         | PRODUCT SPEC<br>-                                                                      |  |
|                                        |  | APPLICATION SPEC<br>-                                                           |         | SIZE<br>A2                                                                             |  |
|                                        |  | WEIGHT<br>-                                                                     |         | CAGE CODE<br>00779                                                                     |  |
|                                        |  | CUSTOMER DRAWING                                                                |         | DRAWING NO<br>C=1825137                                                                |  |
|                                        |  | SCALE<br>2:1                                                                    |         | SHEET<br>3 of 4                                                                        |  |
|                                        |  |                                                                                 |         | REV<br>A7                                                                              |  |

| LOC | DIST | REVISIONS |     |             |      |
|-----|------|-----------|-----|-------------|------|
| AD  | 00   | P         | LTR | DESCRIPTION | DATE |
|     |      |           |     |             | DWN  |
|     |      |           |     | SEE SHEET 1 | APVD |
|     |      |           |     |             |      |

D

C

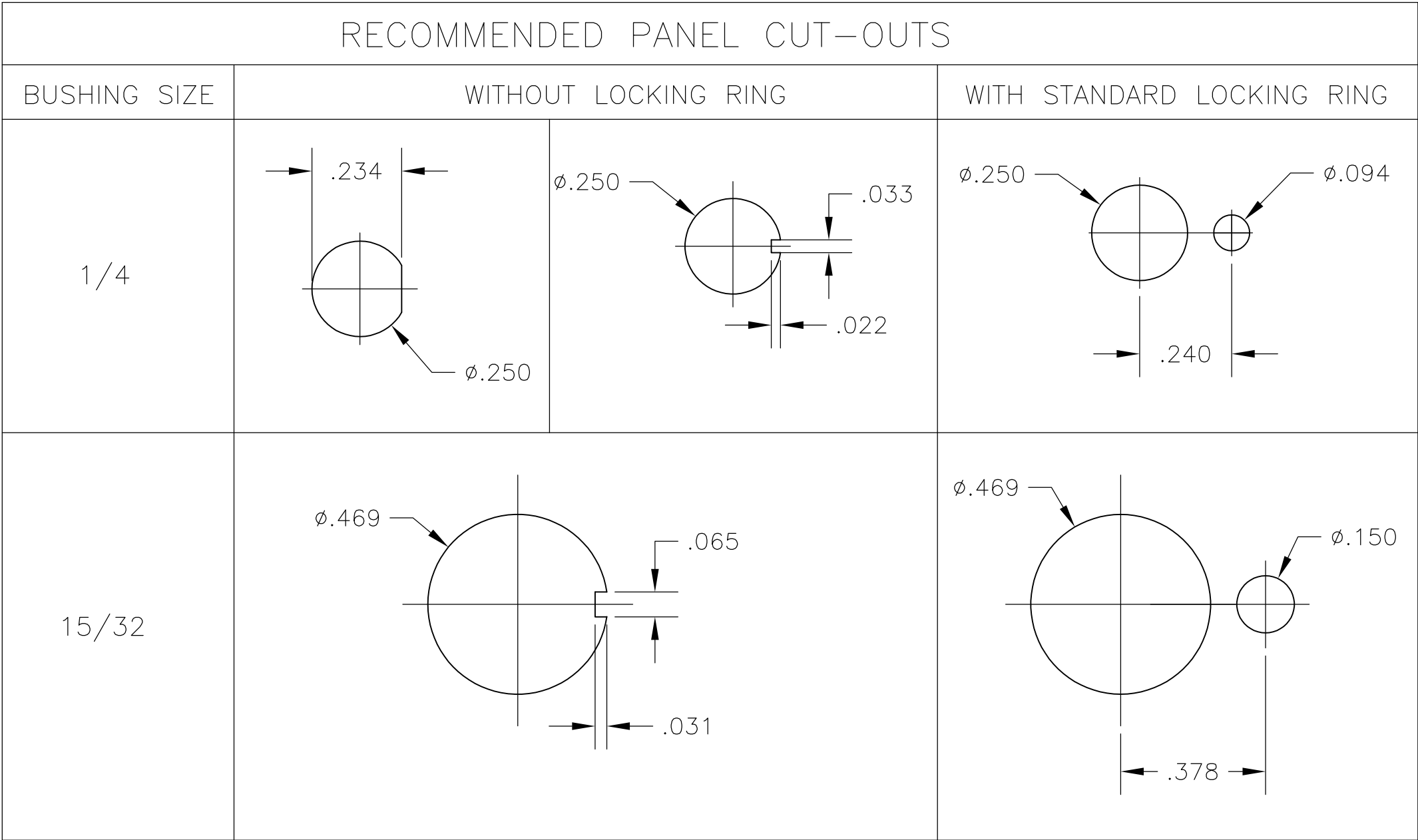
B

A

| Alco P/N               | P/N                    |
|------------------------|------------------------|
| A103KZQ04              | 1825137-1              |
| A103MD9AB04            | 1825137-2              |
| A103MD9AG04            | 1825137-3              |
| A103MD9AQ04            | 1825137-4              |
| A103MD9AV2B04          | 1825137-5              |
| A103P3ZQ04             | 1825137-6              |
| A103SD9AQ04            | 1825137-7              |
| A103SD9AV2B04          | 1825137-8              |
| A103SD9AV2Q04          | 1825137-9              |
| A103SDCB04             | 1-1825137-0            |
| A103SDCQ04             | 1-1825137-1            |
| A103SDZQ04             | 1-1825137-2            |
| A103SYAQ04             | 1-1825137-3            |
| A103SYAV2Q04           | 1-1825137-4            |
| A103SYCB04             | 1-1825137-5            |
| A103SYCQ04             | 1-1825137-6            |
| A103SYWB04             | 1-1825137-7            |
| A103SYWQ04             | 1-1825137-8            |
| A103SYZB04             | 1-1825137-9            |
| A103SYZQ04             | 2-1825137-0            |
| A103T1CG04             | 2-1825137-1            |
| A103T1ZQ04             | 2-1825137-2            |
| A103TZQ04              | 2-1825137-3            |
| A105MD9AB04            | 2-1825137-4            |
| A105MD9AQ04            | 2-1825137-5            |
| A105MYV30Q04           | 2-1825137-6            |
| A105P3CG04             | 2-1825137-7            |
| A105P3CQ04             | 2-1825137-8            |
| A105P3ZQ04             | 2-1825137-9            |
| A103MDAB04             | 3-1825137-0            |
| A105SD9AB04            | 3-1825137-1            |
| A105SD9AV2Q04          | 3-1825137-2            |
| A105SD9V30B04          | 3-1825137-3            |
| A105SYAB04             | 3-1825137-4            |
| A105SYAV2B04           | 3-1825137-5            |
| A105SYCB04             | 3-1825137-6            |
| A105SYCQ04             | 3-1825137-7            |
| A105SYZB04             | 3-1825137-8            |
| A105SYZQ04             | 3-1825137-9            |
| A105T1ZB04             | 4-1825137-0            |
| A105T1ZQ04             | 4-1825137-1            |
| A105TZQ04              | 4-1825137-2            |
| <del>A107KAV2Q04</del> | <del>4-1825137-3</del> |
| A107KZB04              | 4-1825137-4            |
| A107MD9AV2B04          | 4-1825137-5            |
| A107MD9CQ04            | 4-1825137-6            |
| A107MD9V30Q04          | 4-1825137-7            |
| A107P3ZQ04             | 4-1825137-8            |
| A107SYAQ04             | 4-1825137-9            |
| A107SYCB04             | 5-1825137-0            |
| A107SYCQ04             | 5-1825137-1            |
| A107SYZQ04             | 5-1825137-2            |
| A107TZB04              | 5-1825137-3            |
| A105MD9AV2B            | 5-1825137-4            |
| A103MD9V30B04          | 5-1825137-5            |
| A103MCWCB04            | 5-1825137-6            |
| A103SCWCB04            | 5-1825137-7            |

OBSOLETE

PRELIMINARY  
PRELIMINARY  
PRELIMINARY



| MATERIALS CHART        |                           |                  |
|------------------------|---------------------------|------------------|
| COMPONENT NAME         | BASE MATERIAL             | FINISH           |
| CASE                   | DAP, RED, UL94 V-0        |                  |
| FRAME                  | STAINLESS STEEL           |                  |
| B TERMINALS & CONTACTS | COPPER                    | GOLD OVER NICKEL |
| G TERMINALS & CONTACTS | COPPER                    | GOLD OVER SILVER |
| Q TERMINALS & CONTACTS | COPPER                    | .000400 SILVER   |
| ACTUATOR               | PHENOLIC, BLACK, UL94 V-1 |                  |
| LEVER                  | BRASS                     | CHROME           |
| BUSHING                | BRASS                     | NICKEL           |
| SPRING                 | MUSIC WIRE                |                  |
| SUPPORT BRACKET        | BRASS                     | TIN              |
| PIVOT PIN              | STEEL                     | NICKEL           |
| LOCK WASHER            | STAINLESS STEEL           |                  |
| LOCKING RING           | STAINLESS STEEL           |                  |
| NUTS                   | C3604BD BRASS             | NICKEL           |
| TERMINAL SEAL          | EPOXY                     |                  |

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS:  
INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ± -  
1 PLC ± -  
2 PLC ± -  
3 PLC ± .010  
4 PLC ± -  
ANGLES ± 2°  
FINISH -

MATERIAL

-

DWN  
M. ZITTO

CHK  
M. ZITTO

APVD  
M. ZITTO

PRODUCT SPEC

APPLICATION SPEC

WEIGHT  
-

CUSTOMER DRAWING

18MAY05

TE Connectivity

GEMINI A SERIES TOGGLE SWITCH, SINGLE POLE, 3 POSITION FUNCTIONS (03, 05 & 07)

SIZE  
A2

CAGE CODE  
00779

DRAWING NO  
C=1825137

RESTRICTED TO  
-

SCALE  
3:1

SHEET  
4 of 4

REV  
A7

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