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LOCAD

DIST00

REV

DESCRIPTION

DATE

DWN

APVD

A1

REVISED PER ECO-11-004587

11MAR11

RK

HMR

| Component name                        | Base material                                                              | Finish                                                           |
|---------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------|
| Case                                  | LCP, black, UL94 V-0                                                       |                                                                  |
| Terminal, wire lug (gold)             | Brass                                                                      | Gold over nickel                                                 |
| Terminal, PC, RA & VRA (gold)         | Brass                                                                      | Gold over nickel in contact area, Tin over nickel in solder area |
| Terminal, PC & wire lug (silver)      | Silver clad copper                                                         | Silver over nickel                                               |
| Contact (gold)                        | Copper alloy or brass                                                      | Gold over nickel                                                 |
| Contact (silver)                      | Silver clad copper or copper                                               | Silver over nickel                                               |
| Frame                                 | Steel                                                                      | Tin over copper                                                  |
| Spring                                | Music wire                                                                 |                                                                  |
| Plunger Button                        | Nylon 6/6, black, red or blue.<br>UL94 HB (extended) or<br>UL94V-2 (flush) |                                                                  |
| Support bracket (RA*ES versions only) | Brass                                                                      | Tin over copper                                                  |
| Support bracket, VRA                  | Steel                                                                      | Tin over copper                                                  |
| Bushing                               | Brass                                                                      | Nickel over copper                                               |
| ES Housing (ES versions)              | Nylon 6/6, natural, UL94 V-2                                               |                                                                  |
| ES boot (ES versions)                 | Vinyl plastisol, black                                                     |                                                                  |

| Specifications                 |                                                                                                 |
|--------------------------------|-------------------------------------------------------------------------------------------------|
| Rating                         | Gold: .4VA max. @ 20VDC or peak AC resistive<br>Silver: 1 A @ 125VAC or 28 VDC resistive        |
| Initial termination resistance | 20 milliohms max.                                                                               |
| Insulation resistance          | 1,000 Megohms min @ 500 VDC                                                                     |
| Dielectric strength            | 1,000 volts RMS at sea lever                                                                    |
| Timing                         | Break before make                                                                               |
| Plunger travel                 | .030                                                                                            |
| Actuation force                | 50 to 400 grams                                                                                 |
| Life expectancy                | .4 VA, 1 pole: 100,000<br>.4 VA, 2 poles: 80,000<br>1 A, 1 pole: 60,000<br>1 A, 2 poles: 50,000 |
| Operating temperature          | -30° C to +65° C                                                                                |
| Storage temperature            | -30° C to +65° C                                                                                |
| Terminal seal                  | Single pole: epoxy<br>Double pole: epoxy optional                                               |

| Model | Actuator         | Poles   | Rating                | Function           | Plating          | Terminations                 | Process Seal          | Button color | 04 |
|-------|------------------|---------|-----------------------|--------------------|------------------|------------------------------|-----------------------|--------------|----|
| TPB   | Blank = extended | 1       | 1 = Gold .4VA         | C = SPST momentary | G = Gold         | Blank = Wire lug             | ES = process sealed 2 | 0 = Black    |    |
|       | F = flush        | 2 (1+1) | 3 = Silver 1<br>Amp 1 | F = SPDT momentary | Blank = Silver 1 | PC = printed circuit         |                       | 2 = Red      |    |
|       |                  | 2       |                       | M = DPST momentary |                  | RA = right angle 2           |                       | 6 = Blue     |    |
|       |                  |         |                       | R = DPDT momentary |                  | VRA = vertical right angle 3 |                       |              |    |

NOTES:  
1. Silver only available in wire lug and pc terminations  
2. RAES available with B and C bushing only  
3. VRA only available in single pole

| P/N         | Alco P/N        | Flush Actuator? | Poles | Throws | Plating | Terminals   | Process sealed? | Button Color | Function |      | Connected Terminals |          | Dim A |
|-------------|-----------------|-----------------|-------|--------|---------|-------------|-----------------|--------------|----------|------|---------------------|----------|-------|
|             |                 |                 |       |        |         |             |                 |              | ALCO     | ALCO | ALCO                | ALCO     |       |
| 1825097-1   | TPB11CGPC004    | no              | 1     | 1      | Gold    | PC          | No              | Black        | Off      | Mom  | Off                 | 1-3      | .133  |
| 1825097-2   | TPB11CGPC204    | no              | 1     | 1      | Gold    | PC          | No              | Red          | Off      | Mom  | Off                 | 1-3      | .133  |
| 1825097-3   | TPB11CGPCES004  | no              | 1     | 1      | Gold    | PC          | yes             | Black        | Off      | Mom  | Off                 | 1-3      | .133  |
| 1825097-6   | TPB11CGRA004    | no              | 1     | 1      | Gold    | Right Angle | No              | Black        | Off      | Mom  | Off                 | 1-3      | .133  |
| 1825097-4   | TPB11CGRA204    | no              | 1     | 1      | Gold    | Right Angle | No              | Red          | Off      | Mom  | Off                 | 1-3      | .133  |
| 1825097-5   | TPB11CGRAES004  | no              | 1     | 1      | Gold    | Right Angle | yes             | Black        | Off      | Mom  | Off                 | 1-3      | .133  |
| 1825097-7   | TPB11CGRAES204  | no              | 1     | 1      | Gold    | Right Angle | yes             | Red          | Off      | Mom  | Off                 | 1-3      | .133  |
| 1825097-8   | TPB11CGVRA004   | no              | 1     | 1      | Gold    | VRA         | No              | Black        | Off      | Mom  | Off                 | 1-3      | .117  |
| 1825097-9   | TPB11FGPC004    | no              | 1     | 2      | Gold    | PC          | No              | Black        | On       | Mom  | 1-2                 | 2-3      | .133  |
| 1-1825097-0 | TPB11FGPCES204  | no              | 1     | 2      | Gold    | PC          | yes             | Red          | On       | Mom  | 1-2                 | 2-3      | .133  |
| 1-1825097-1 | TPB11FGRA004    | no              | 1     | 2      | Gold    | Right Angle | No              | Black        | On       | Mom  | 1-2                 | 2-3      | .133  |
| 1-1825097-2 | TPB11FGRA204    | no              | 1     | 2      | Gold    | Right Angle | No              | Red          | On       | Mom  | 1-2                 | 2-3      | .133  |
| 1-1825097-3 | TPB11FGRA604    | no              | 1     | 2      | Gold    | Right Angle | No              | Blue         | On       | Mom  | 1-2                 | 2-3      | .133  |
| 1-1825097-4 | TPB11FGRAES004  | no              | 1     | 2      | Gold    | Right Angle | yes             | Black        | On       | Mom  | 1-2                 | 2-3      | .133  |
| 1-1825097-5 | TPB11FGRAES604  | no              | 1     | 2      | Gold    | Right Angle | yes             | Blue         | On       | Mom  | 1-2                 | 2-3      | .133  |
| 1-1825097-6 | TPB11FGVRA004   | no              | 1     | 2      | Gold    | VRA         | No              | Black        | On       | Mom  | 1-2                 | 2-3      | .117  |
| 1-1825097-7 | TPB21MGPC004    | no              | 2     | 1      | Gold    | PC          | No              | Black        | Off      | Mom  | Off                 | 1-3, 4-6 | .133  |
| 1-1825097-8 | TPB21MGPC204    | no              | 2     | 1      | Gold    | PC          | No              | Red          | Off      | Mom  | Off                 | 1-3, 4-6 | .133  |
| 2-1825097-8 | TPB21MGRA004    | no              | 2     | 1      | Gold    | Right Angle | No              | Black        | Off      | Mom  | Off                 | 1-3, 4-6 | .133  |
| 1-1825097-9 | TPB21RGRA004    | no              | 2     | 2      | Gold    | Right Angle | No              | Black        | On       | Mom  | 1-2, 4-5            | 2-3, 5-6 | .133  |
| 2-1825097-0 | TPBF11CGPCES004 | yes             | 1     | 1      | Gold    | PC          | yes             | Black        | Off      | Mom  | Off                 | 1-3      | .000  |
| 2-1825097-1 | TPBF11CGRA004   | yes             | 1     | 1      | Gold    | Right Angle | No              | Black        | Off      | Mom  | Off                 | 1-3      | .000  |
| 2-1825097-2 | TPBF11CGRAES004 | yes             | 1     | 1      | Gold    | Right Angle | yes             | Black        | Off      | Mom  | Off                 | 1-3      | .000  |
| 2-1825097-3 | TPBF11FGPCES004 | yes             | 1     | 2      | Gold    | PC          | yes             | Black        | On       | Mom  | 1-2                 | 2-3      | .000  |
| 2-1825097-4 | TPBF11FGRA004   | yes             | 1     | 2      | Gold    | Right Angle | No              | Black        | On       | Mom  | 1-2                 | 2-3      | .000  |
| 2-1825097-5 | TPBF11FGRA204   | yes             | 1     | 2      | Gold    | Right Angle | No              | Red          | On       | Mom  | 1-2                 | 2-3      | .000  |
| 2-1825097-6 | TPBF11FGRAES004 | yes             | 1     | 2      | Gold    | Right Angle | yes             | Black        | On       | Mom  | 1-2                 | 2-3      | .000  |

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES

0 PLC ± .010  
1 PLC ± .010  
2 PLC ± .010  
3 PLC ± .010  
4 PLC ± .010  
ANGLES ± .010

TOLERANCES UNLESS OTHERWISE SPECIFIED:

FINISH

MATERIAL

DWN M. BINNER 20JUL05  
CHK M. ZITTO 21JUL05  
APVD M. ZITTO 21JUL05

PRODUCT SPEC

APPLICATION SPEC

WEIGHT

NAME

SIZE CAGE CODE DRAWING NO

RESTRICTED TO

TE Connectivity

PUSHBUTTON SWITCH, TPB SERIES

A1 00779 1825097

CUSTOMER DRAWING

SCALE 4:1

SHEET 1 OF 6

REV A1

NOTES:

1. TERMINAL NUMBERS ARE FOR REFERENCE ONLY AND DO NOT APPEAR ON SWITCHES

2. ALL MATERIALS AND FINISHES COMPLY WITH EU DIRECTIVE 2002/95/EC OF 27JAN2003 (ROHS).

3. DISPOSABLE BOOT SUPPLIED WITH ES VERSIONS. BOOT TO BE PLACED OVER BUSHING BEFORE SOLDER WASHING

4. CENTER TERMINAL PRESENT ON DOUBLE THROW SWITCHES ONLY.

5. CENTER HOLE REQUIRED ON DOUBLE THROW SWITCHES ONLY.

4805 (3/11)



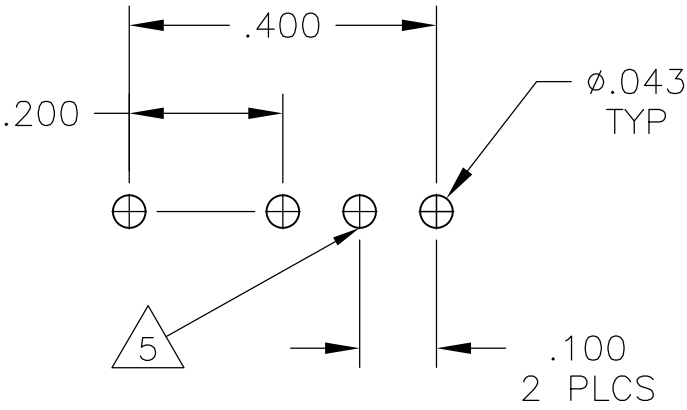
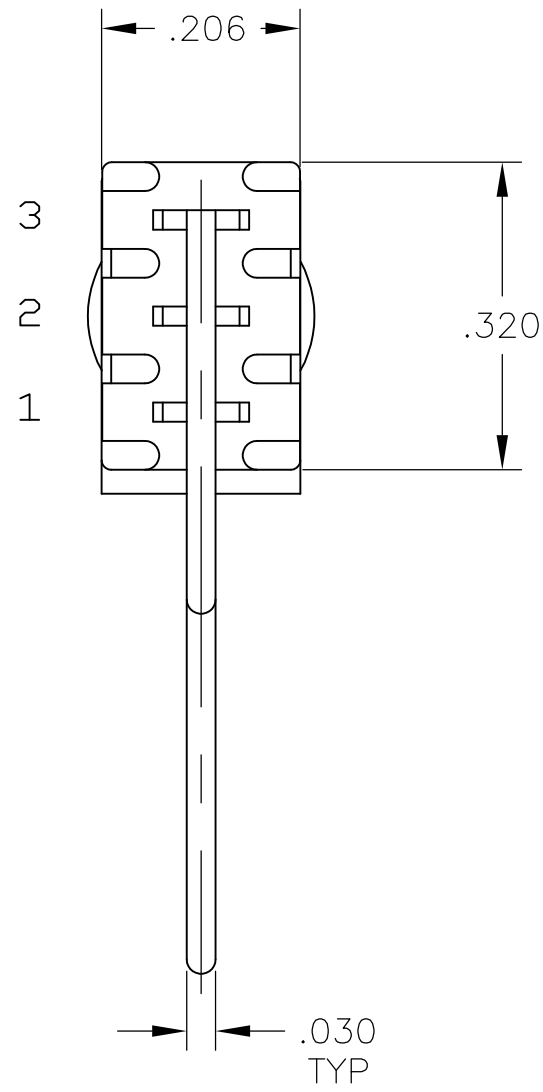
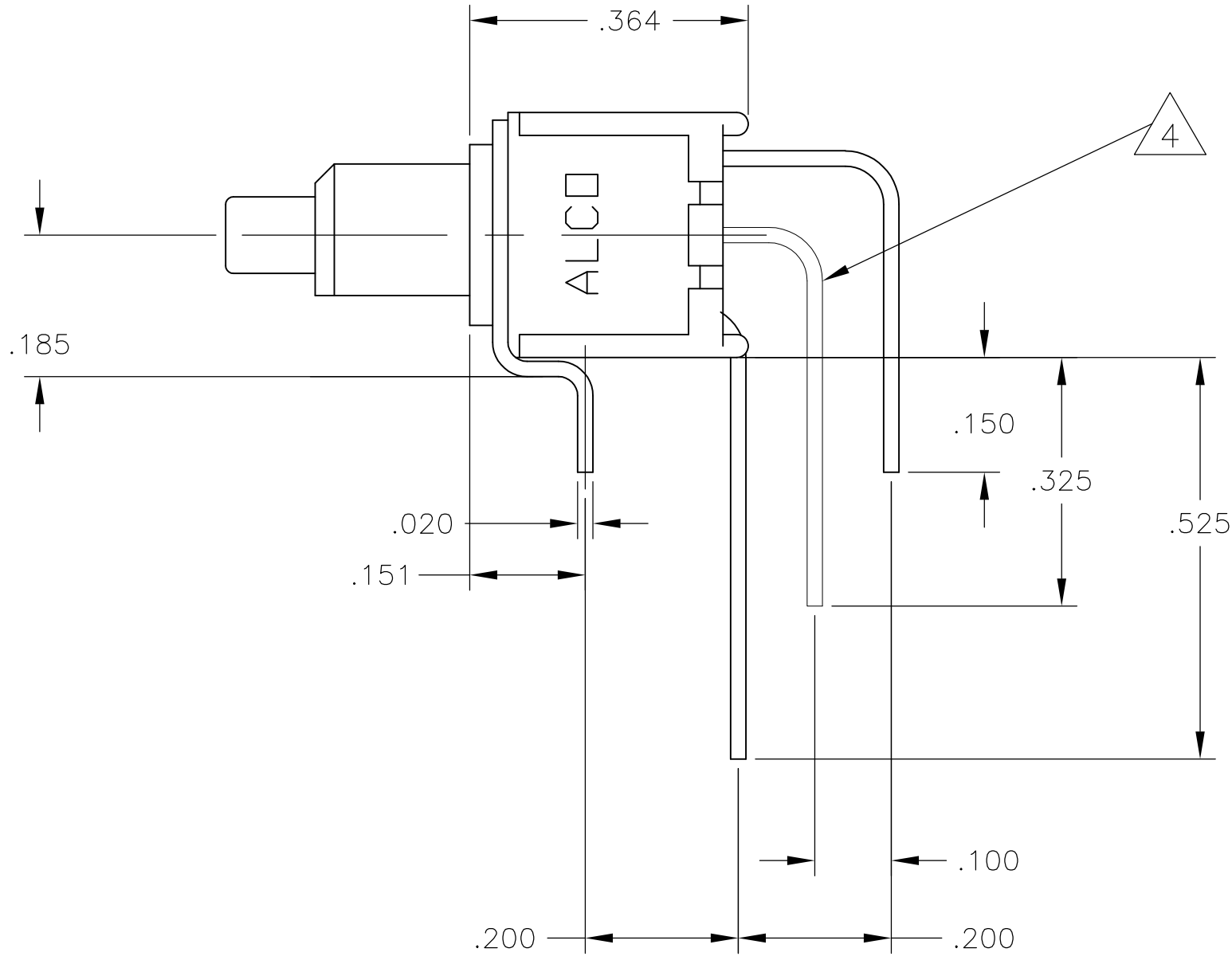
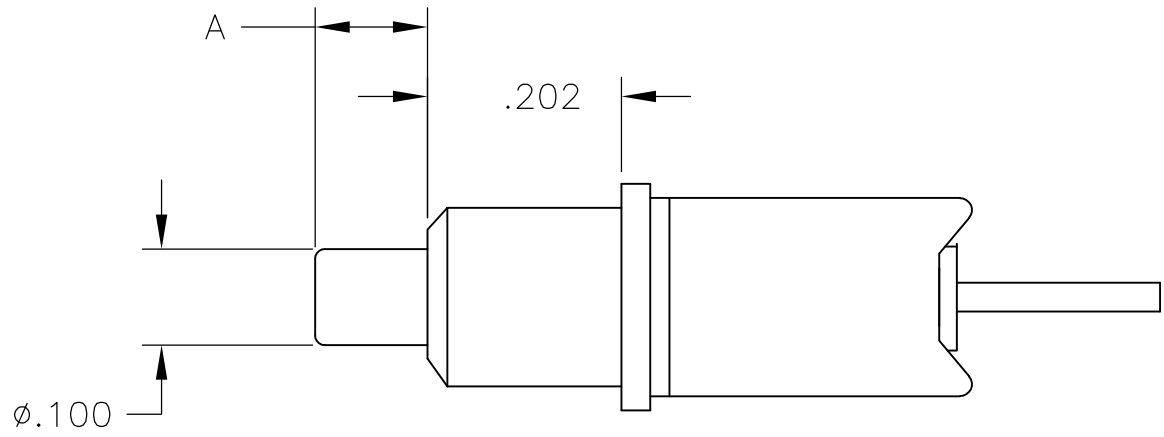
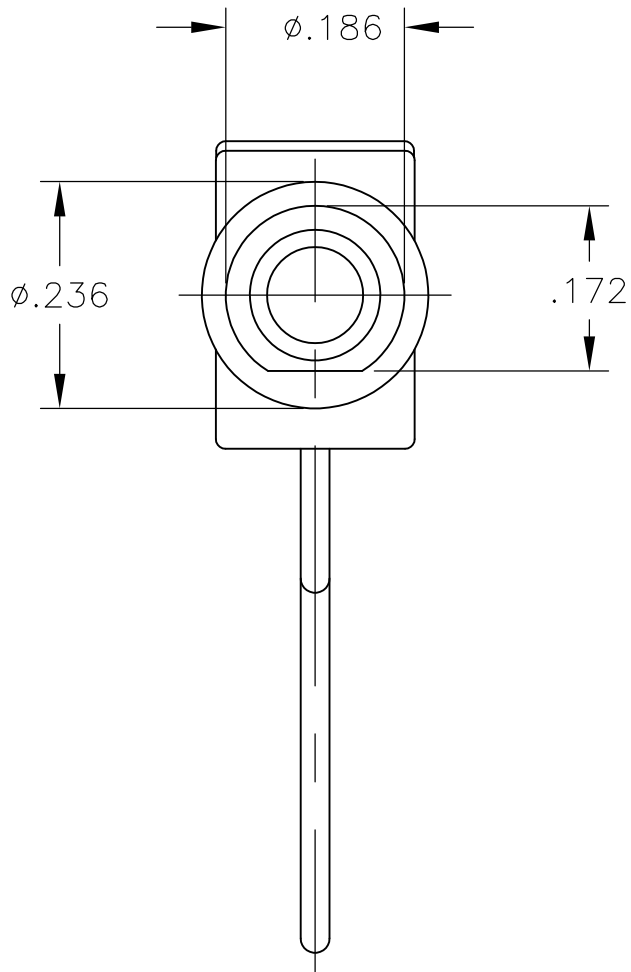








| LOC | DIST | REVISIONS |     |             |      |     |
|-----|------|-----------|-----|-------------|------|-----|
| AD  | —    | REV       | LTR | DESCRIPTION | DATE | DWN |
|     |      | —         | —   | SEE SHEET 1 | —    | —   |



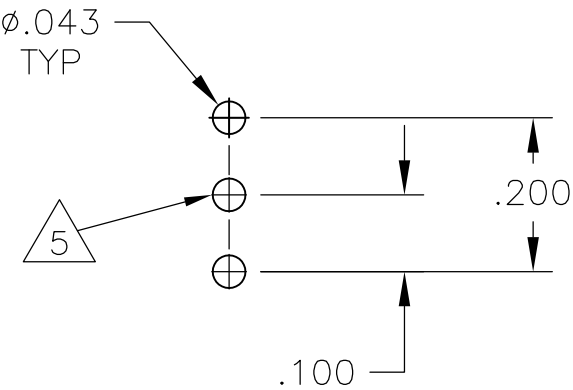
PCB HOLE LAYOUT

TPB11CVRA & TPB11FGVRA

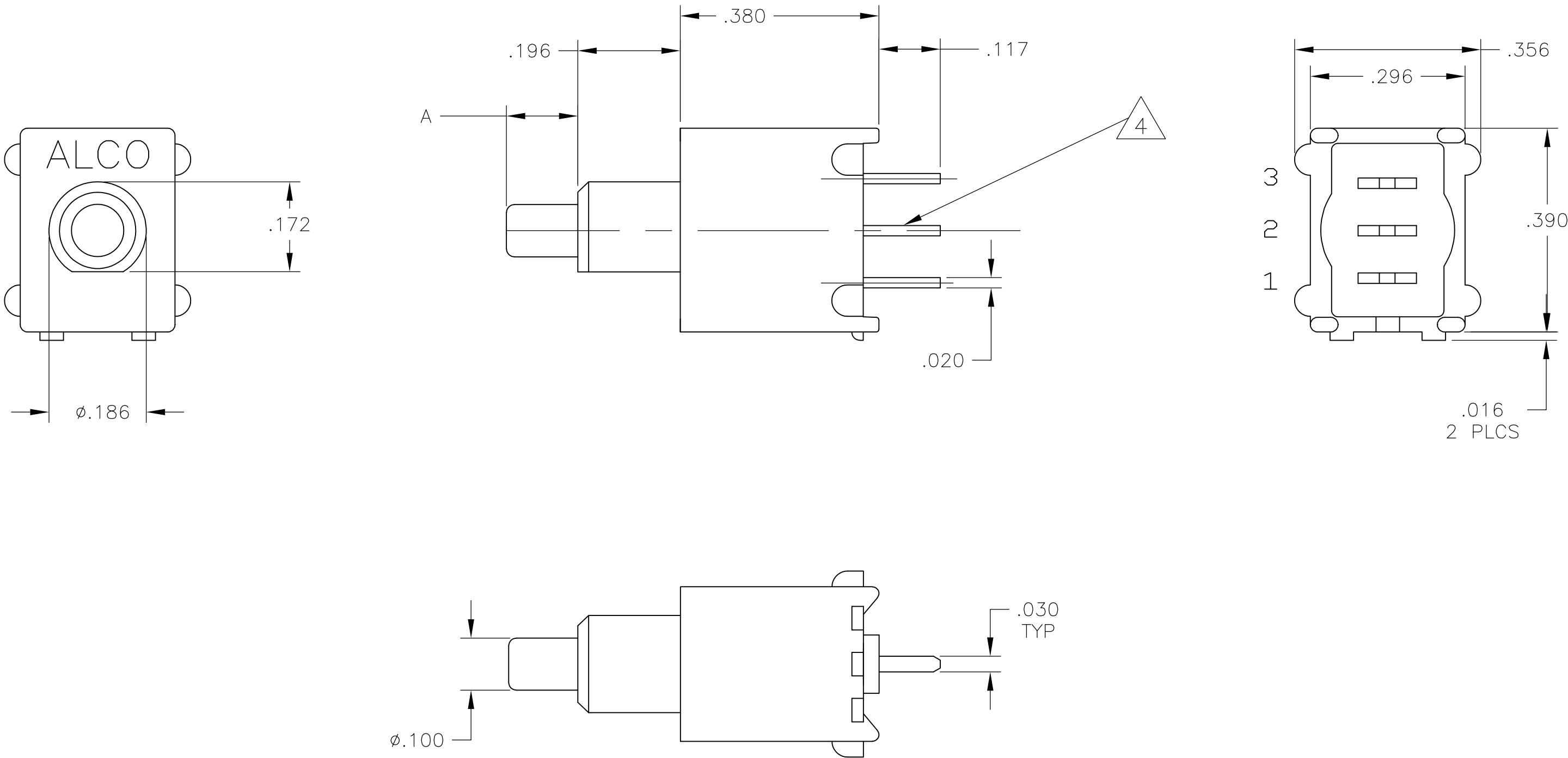
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|----------------------------------------|--|-------------------|---------|---------------------------------------|--------------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |  | DWN<br>M. BINNER  | 20JUL05 | TE Connectivity                       |                    |
|                                        |  | CHK<br>M. ZITTO   | 21JUL05 |                                       |                    |
| DIMENSIONS:<br>INCHES                  |  | APPRO<br>M. ZITTO | 21JUL05 | NAME<br>PUSHBUTTON SWITCH, TPB SERIES |                    |
|                                        |  | PRODUCT SPEC      |         | —                                     |                    |
|                                        |  | APPLICATION SPEC  |         | —                                     |                    |
| MATERIAL<br>—                          |  | WEIGHT<br>—       |         | SIZE<br>A1                            | RESTRICTED TO<br>— |
|                                        |  |                   |         | CAGE CODE<br>00779                    | DATE<br>1825097    |
|                                        |  |                   |         | SCALE<br>4:1                          | SHEET<br>4 OF 6    |
|                                        |  |                   |         | REV<br>A1                             | REV<br>A1          |



| LOC | DIST | REVISIONS |     |             |      |     |
|-----|------|-----------|-----|-------------|------|-----|
| AD  | —    | P         | LTR | DESCRIPTION | DATE | OWN |
|     |      | —         | —   | SEE SHEET 1 | —    | —   |



PCB HOLE LAYOUT

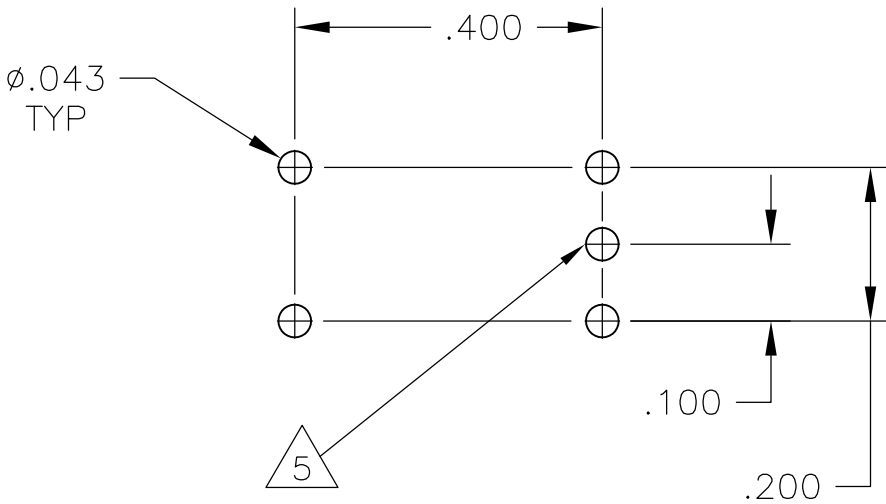
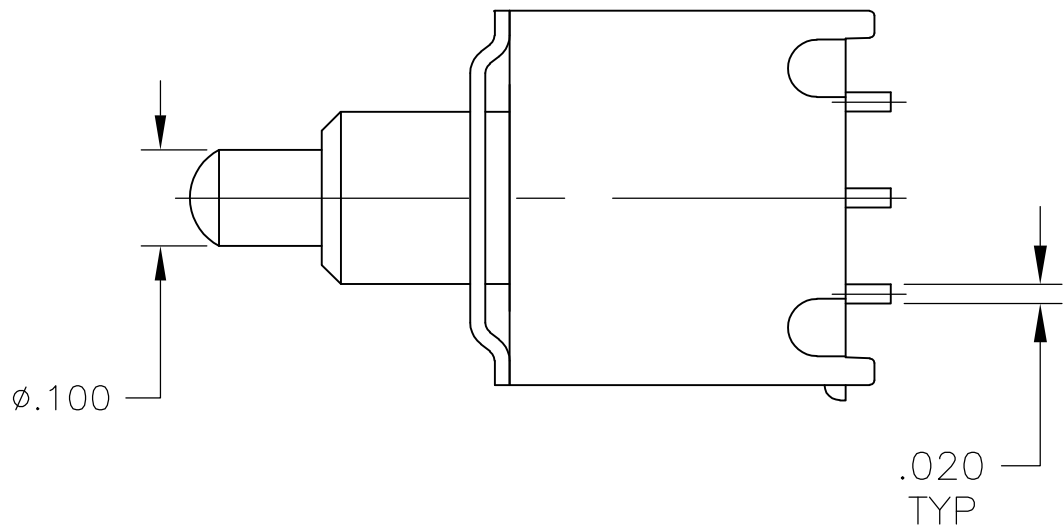


TPB11CGPCES & TPB11FGPCES  
TPBF11CGPCES & TPBF11FGPCES

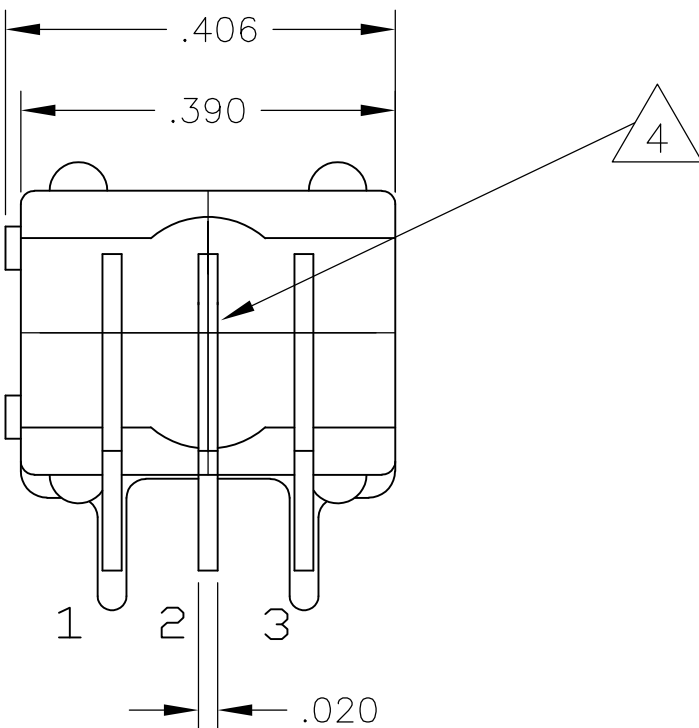
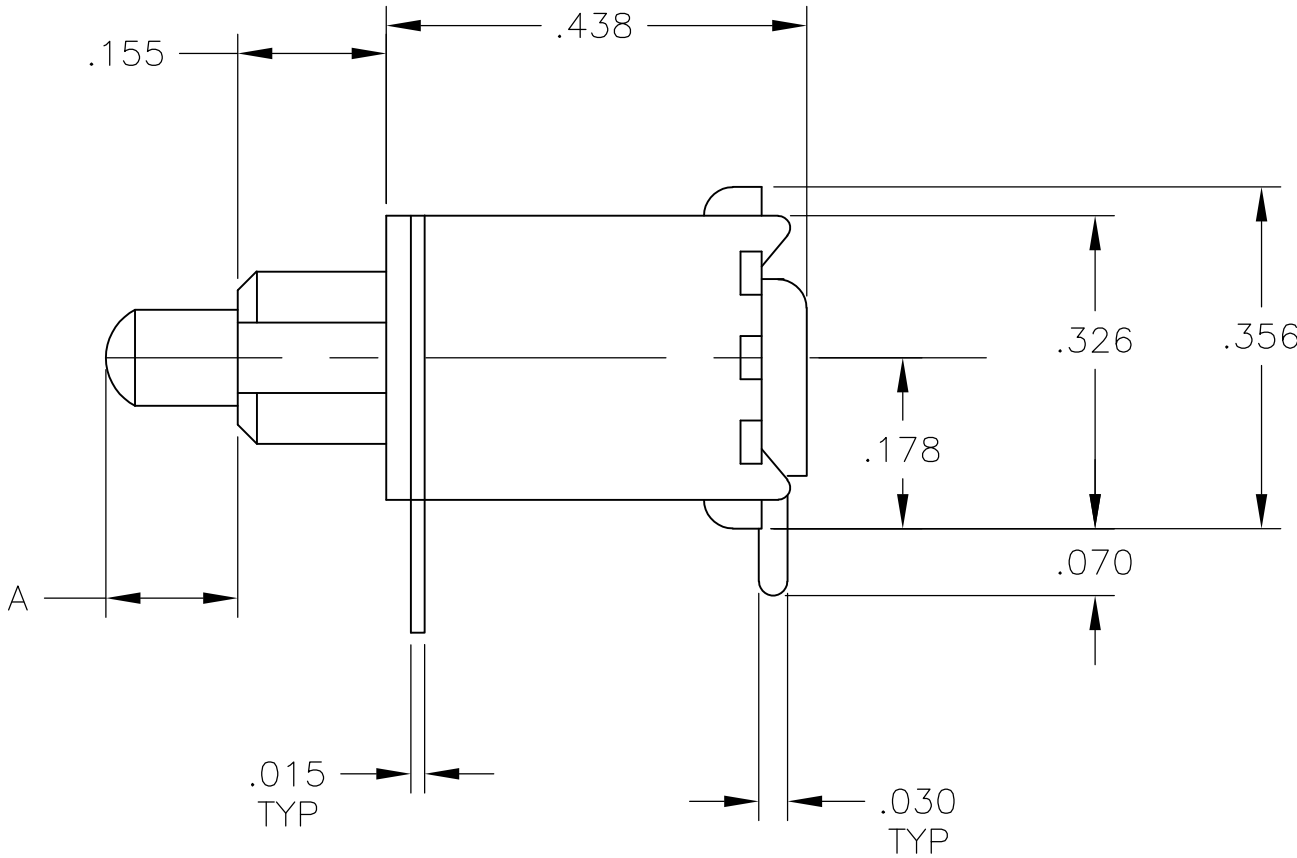
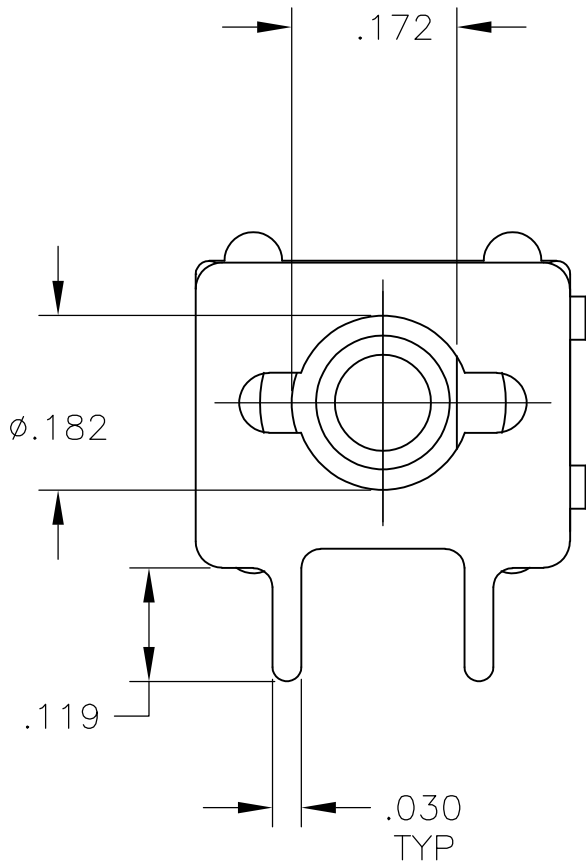
|                                        |                                                                                                    |                        |         |                                       |  |
|----------------------------------------|----------------------------------------------------------------------------------------------------|------------------------|---------|---------------------------------------|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |                                                                                                    | DWN<br>M. BINNER       | 20JUL05 | TE Connectivity                       |  |
|                                        |                                                                                                    | CHK<br>M. ZITTO        | 21JUL05 |                                       |  |
| DIMENSIONS:<br>INCHES                  | TOLERANCES UNLESS OTHERWISE SPECIFIED:                                                             | AP'D<br>M. ZITTO       | 21JUL05 | NAME<br>PUSHBUTTON SWITCH, TPB SERIES |  |
|                                        |                                                                                                    | PRODUCT SPEC           |         | —                                     |  |
|                                        | 0. PLC ± .010<br>1. PLC ± .010<br>2. PLC ± .010<br>3. PLC ± .010<br>4. PLC ± .010<br>ANGLES ± .010 | APPLICATION SPEC       |         | —                                     |  |
|                                        |                                                                                                    | —                      |         | —                                     |  |
| MATERIAL                               | FINISH                                                                                             | WEIGHT                 | —       | SIZE<br>A1                            |  |
| —                                      | —                                                                                                  | —                      |         | CAGE CODE<br>00779                    |  |
| CUSTOMER DRAWING                       |                                                                                                    | DRAWING NO.<br>1825097 |         | RESTRICTED TO<br>—                    |  |
|                                        |                                                                                                    | SCALE<br>4:1           |         | SHEET<br>5                            |  |
|                                        |                                                                                                    |                        |         | OF<br>6                               |  |
|                                        |                                                                                                    |                        |         | REV<br>A1                             |  |



| LOC | DIST | REVISIONS |     |             |      |     |
|-----|------|-----------|-----|-------------|------|-----|
| AD  | —    | REV       | LTR | DESCRIPTION | DATE | DWN |
|     |      | —         | —   | SEE SHEET 1 | —    | —   |



PCB HOLE LAYOUT



TPB11CGRAES & TPB11FGRAES  
TPBF11CGRAES & TPBF11FGRAES

|                                        |                                                                                     |                    |                  |                                       |                    |
|----------------------------------------|-------------------------------------------------------------------------------------|--------------------|------------------|---------------------------------------|--------------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |                                                                                     | DWN<br>M. BINNER   | 20JUL05          | TE Connectivity                       |                    |
|                                        |                                                                                     | CHK<br>M. ZITTO    | 21JUL05          |                                       |                    |
| DIMENSIONS:<br>INCHES                  | TOLERANCES UNLESS OTHERWISE SPECIFIED:                                              | APPROD<br>M. ZITTO | 21JUL05          | NAME<br>PUSHBUTTON SWITCH, TPB SERIES |                    |
|                                        |                                                                                     | PRODUCT SPEC       |                  | —                                     |                    |
|                                        | 0. PLC ± —<br>1. PLC ± —<br>2. PLC ± —<br>3. PLC ± .010<br>4. PLC ± —<br>ANGLES ± — | APPLICATION SPEC   |                  | —                                     |                    |
|                                        |                                                                                     | —                  |                  | —                                     |                    |
| MATERIAL<br>—                          | FINISH<br>—                                                                         | WEIGHT<br>—        | A1 00779 1825097 |                                       | RESTRICTED TO<br>— |
| CUSTOMER DRAWING                       |                                                                                     |                    | SCALE<br>4:1     | SHEET<br>6 OF 6                       | REV<br>A1          |



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.