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1

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LOCAD

DIST00

REVISED PER ECO-15-004048

DATE16MAR2015

DWNNK

APVD RH

| Component name | Base material | Finish |
|----------------------------------|--|--|
| Case | LCP, black, UL94 V-0 | |
| Terminal, wire lug (gold) | Brass | Gold over nickel |
| Terminal, PC & RA (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, UL94 HB | |
| Guide, CC & FF switches only | Nylon 6/6, white | |

| Rating | Gold: .4VA max. @ 20VDC or peak AC resistive |
|--------------------------------|--|
| | 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 |
| | .4 VA, 2 poles: 80,000 |
| | 1 A, 1 pole: 60,000 |
| | 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 |
| | Double pole: epoxy optional |

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

CENTER TERMINAL PRESENT ON DOUBLE THROW SWITCHES ONLY.

4

OBSOLETE.

| Model | Poles | Rating | Function | Plating | Terminations | Button color | 04 |
|-------|---------|------------------|--------------------|----------------|----------------------|--------------|----|
| TPA | | | | | | | 04 |
| | 1 | 1 = Gold .4VA | C = SPST momentary | G = Gold | Blank = Wire lug | 0 = Black | |
| | 2 (1+1) | 3 = Silver 1 Amp | F = SPDT momentary | Blank = Silver | PC = printed circuit | 2 = Red | |
| | | | M = DPST momentary | | RA = right angle | 6 = Blue | |
| | | | R = DPDT momentary | | | | |

Notes:
1. Silver only available in wire lug and pc terminations

| TE P/N | Alco P/N | Poles | Throws | Plating | Terminals | Button Color | Function | | Connected Terminals | | |
|--------------|---------------|---------|--------|---------|-------------|--------------|----------|-----|---------------------|----------|----------|
| 1825096-1 | TPA11CGPC004 | 1 | 1 | Gold | PC | Black | | Off | Mom | Off | 1-3 |
| 41825096-2 | TPA11CGPC204 | 1 | 1 | Gold | PC | Red | | Off | Mom | Off | 1-3 |
| 41825096-3 | TPA11CGPC604 | 1 | 1 | Gold | PC | Blue | | Off | Mom | Off | 1-3 |
| 1825096-4 | TPA11CGRA004 | 1 | 1 | Gold | Right Angle | Black | | Off | Mom | Off | 1-3 |
| 1825096-5 | TPA11CGRA204 | 1 | 1 | Gold | Right Angle | Red | | Off | Mom | Off | 1-3 |
| 41825096-6 | TPA11CGRA604 | 1 | 1 | Gold | Right Angle | Blue | | Off | Mom | Off | 1-3 |
| 1825096-7 | TPA11FGPC004 | 1 | 2 | Gold | PC | Black | | On | Mom | 1-2 | 2-3 |
| 41825096-8 | TPA11FGPC204 | 1 | 2 | Gold | PC | Red | | On | Mom | 1-2 | 2-3 |
| 41825096-9 | TPA11FGPC604 | 1 | 2 | Gold | PC | Blue | | On | Mom | 1-2 | 2-3 |
| 1-1825096-0 | TPA11FGRA004 | 1 | 2 | Gold | Right Angle | Black | | On | Mom | 1-2 | 2-3 |
| 41-1825096-1 | TPA11FGRA204 | 1 | 2 | Gold | Right Angle | Red | | On | Mom | 1-2 | 2-3 |
| 41-1825096-2 | TPA11FGRA604 | 1 | 2 | Gold | Right Angle | Blue | | On | Mom | 1-2 | 2-3 |
| 41-1825096-3 | TPA21CCGPC004 | 2 (1+1) | 1 | Gold | PC | Black | | Off | Mom | Off | 1-3, 4-6 |
| 1-1825096-4 | TPA21CCGRA004 | 2 (1+1) | 1 | Gold | Right Angle | Black | | Off | Mom | Off | 1-3, 4-6 |
| 41-1825096-5 | TPA21FFGRA204 | 2 (1+1) | 2 | Gold | Right Angle | Red | | On | Mom | 1-2, 4-5 | 2-3, 5-6 |
| 41-1825096-6 | TPA21MGRA004 | 2 | 1 | Gold | Right Angle | Black | | Off | Mom | Off | 1-3, 4-6 |

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES

MATERIAL-

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ± -

1 PLC ± -

2 PLC ± -

3 PLC ± .010

4 PLC ± -

ANGLES ± -

FINISH-

THIS DRAWING IS A CONTROLLED DOCUMENT.

DWNNM.BINNER01SEP05

CHKM.ZITTO21JUL05

APVDM.ZITTO21JUL05

PRODUCT SPEC

APPLICATION SPEC

WEIGHT-

CUSTOMER DRAWING

TE Connectivity

PUSHBUTTON SWITCH, TPA SERIES

SIZEA100779

CAGE CODE00779

DRAWING NO1825096

RESTRICTED TO-

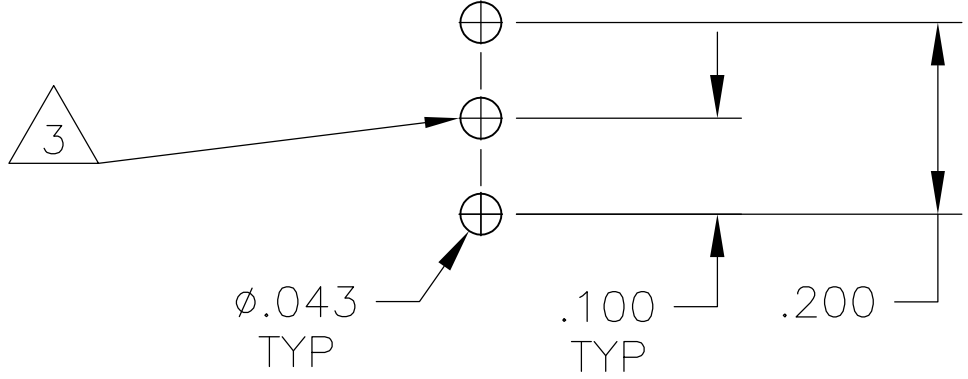
SCALE4:1

SHEET1 OF 4

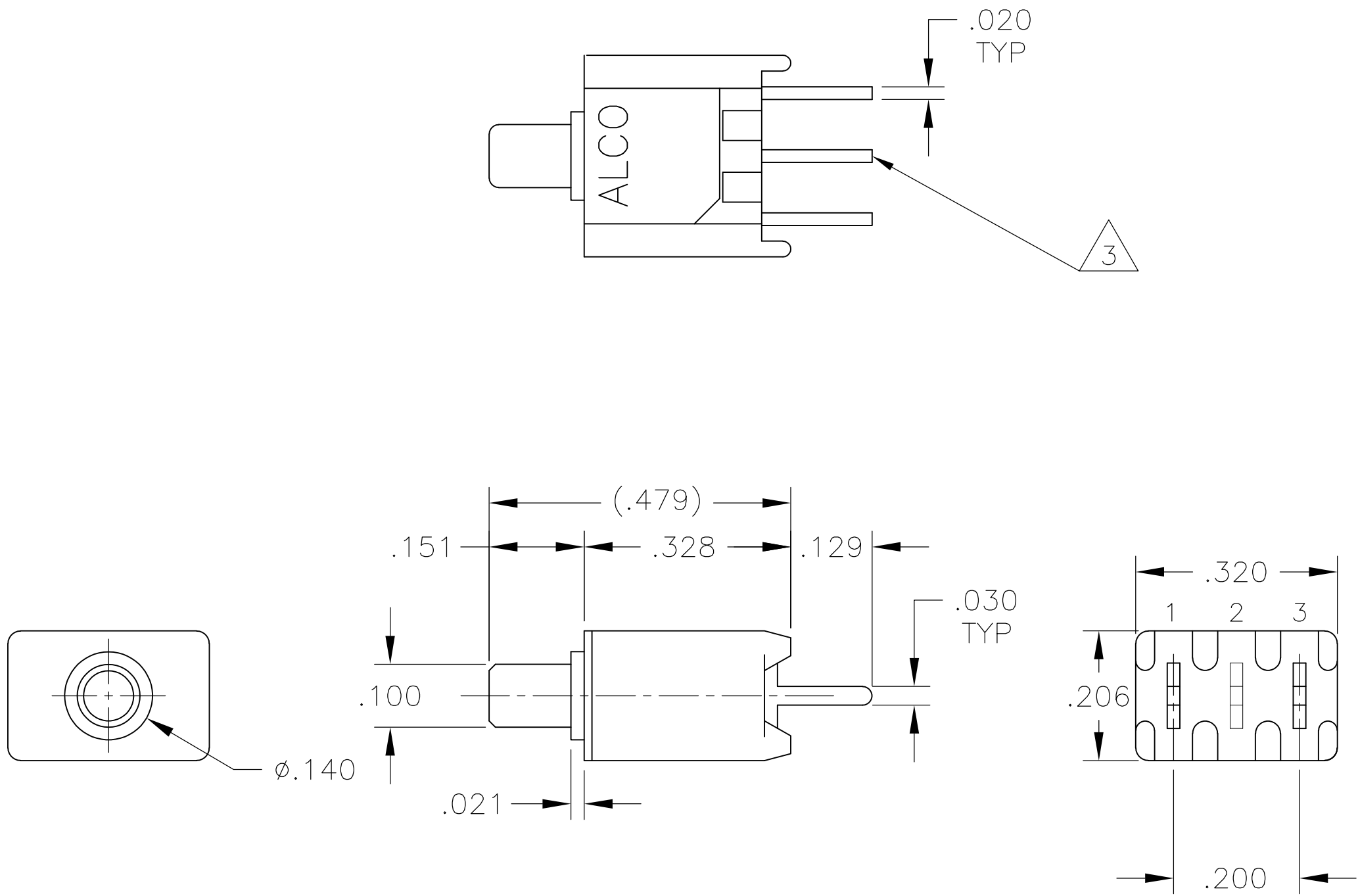
REV A2

4805 (3/11)

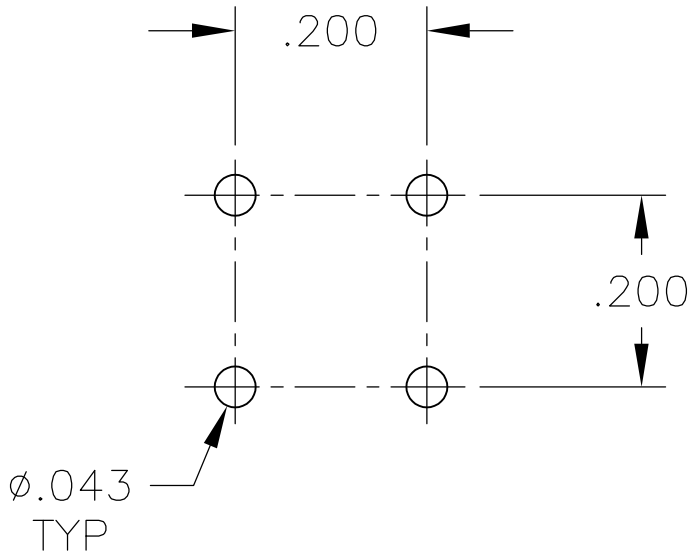
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| | | | | | | APVD |
| | | | | | | — |



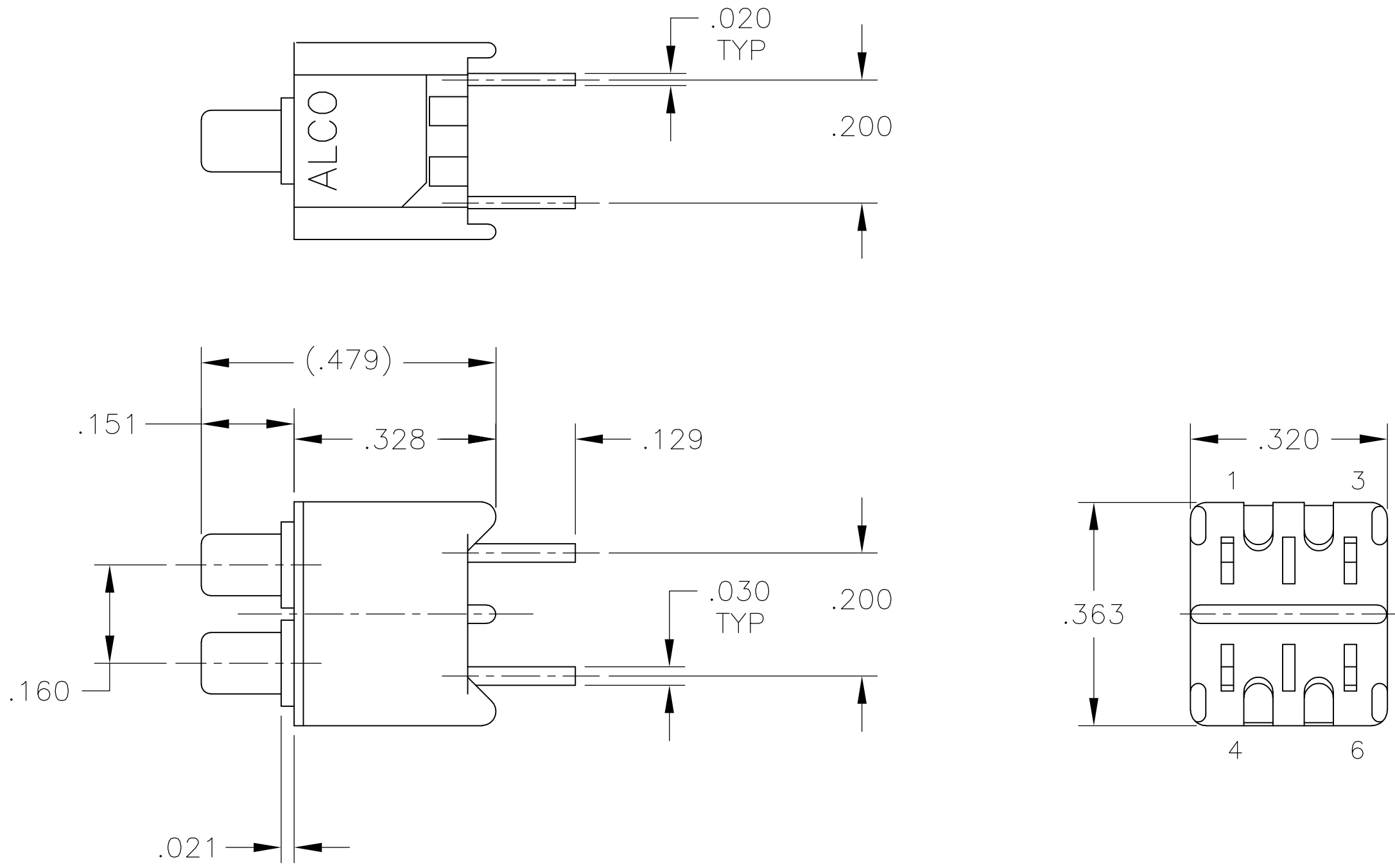
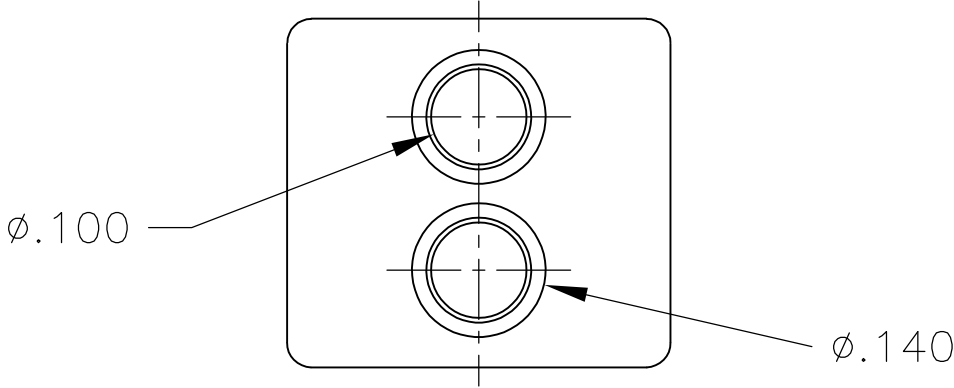
PCB HOLE LAYOUT





TPA11CGPC
TPA11FGPC



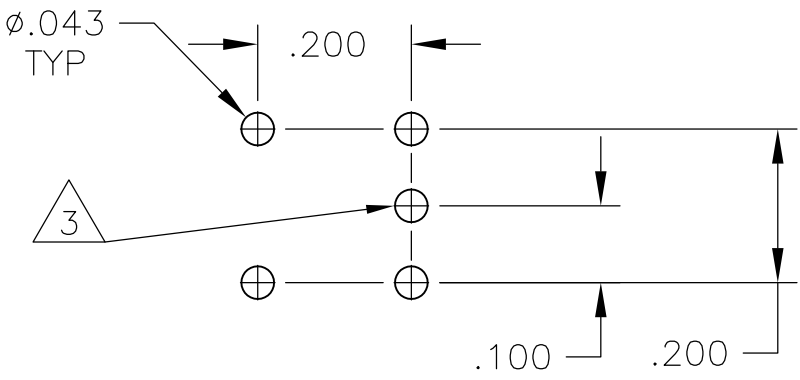
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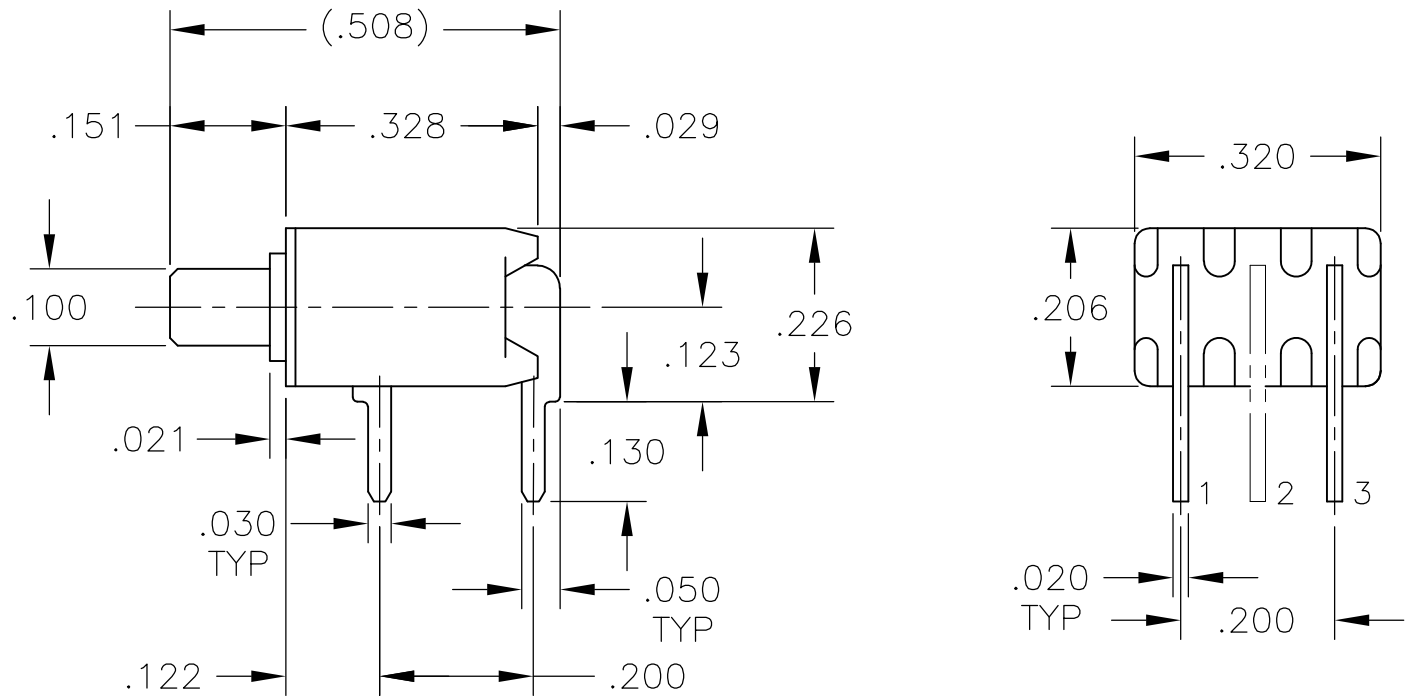
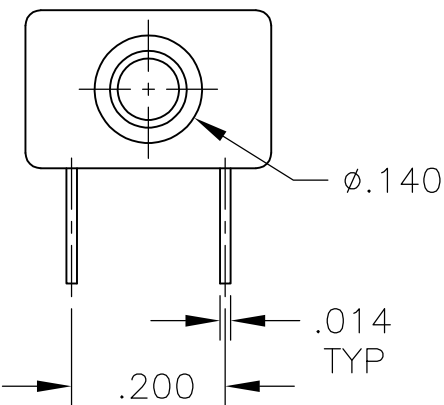
TPA21CCGPC

| | | | | | |
|--|--|------------------|---------|---|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT. | | DWN M. BINNER | 01SEP05 |  TE Connectivity | |
| | | CHK M. ZITTO | 21JUL05 | | |
| DIMENSIONS: INCHES | | APD M. ZITTO | 21JUL05 | NAME | |
|  | | PRODUCT SPEC | | PUSHBUTTON SWITCH, TPA SERIES | |
| | | APPLICATION SPEC | | | |
| | | — | | | |
| 0 P.L.C ± — 1 P.L.C ± — 2 P.L.C ± — 3 P.L.C ± .010 4 P.L.C ± — ANGLES ± — FINISH — | | WEIGHT — | | SIZE CAGE CODE DRAWING NO A1 00779 C 1825096 | |
| MATERIAL — | | CUSTOMER DRAWING | | RESTRICTED TO — | |
| | | | | SCALE 4:1 SHEET 2 OF 4 REV A2 | |

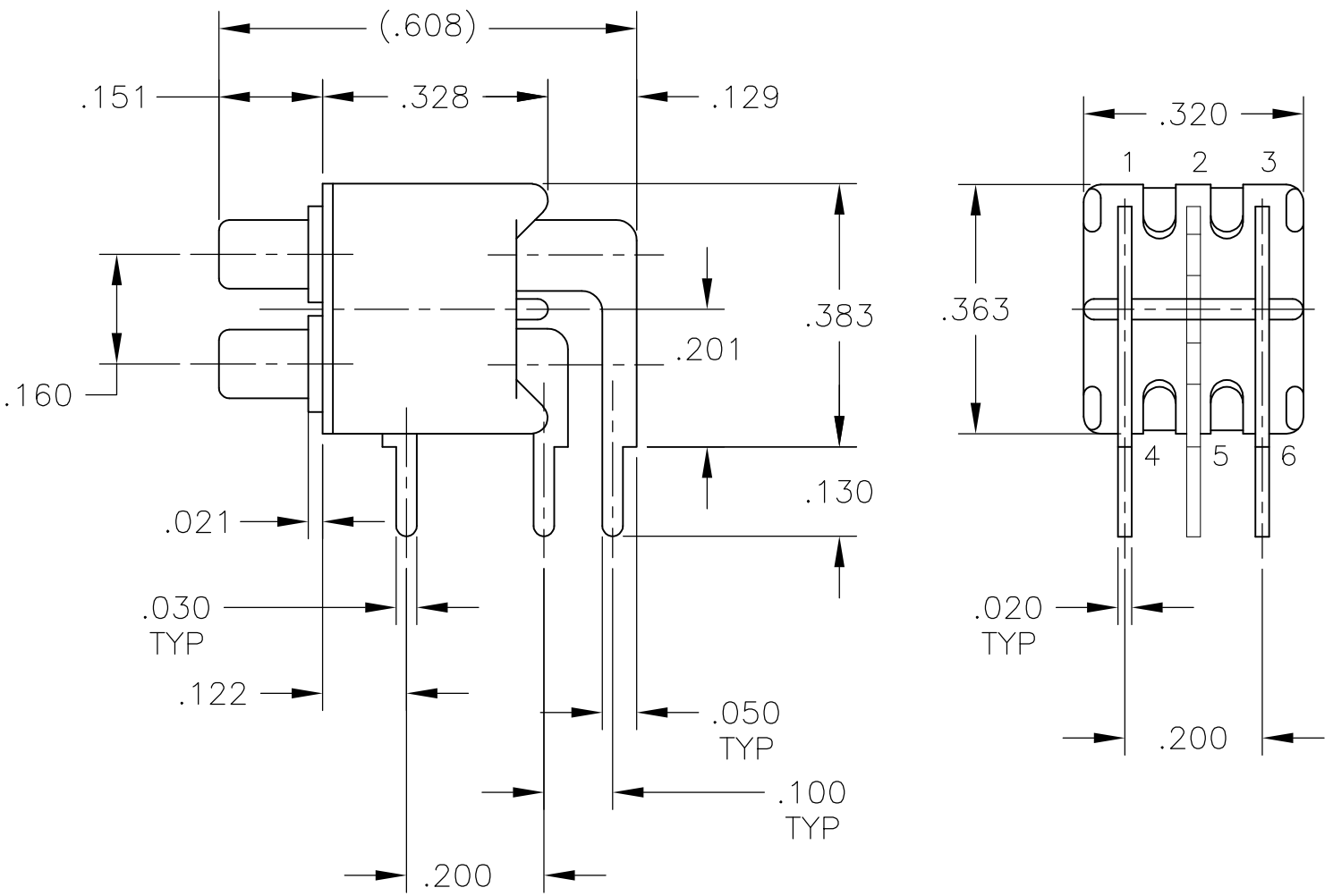
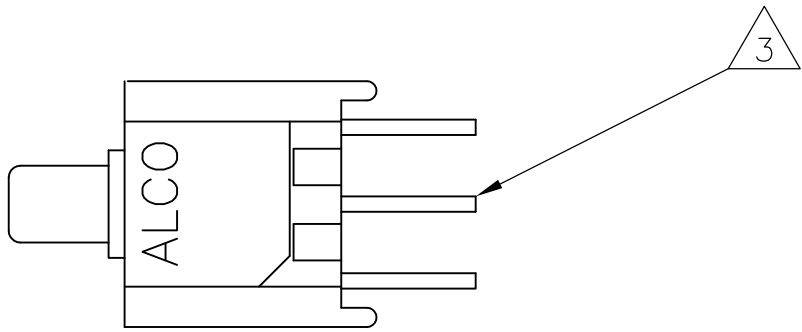
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| | | — | — | SEE SHEET 1 | — | — |





PCB HOLE LAYOUT



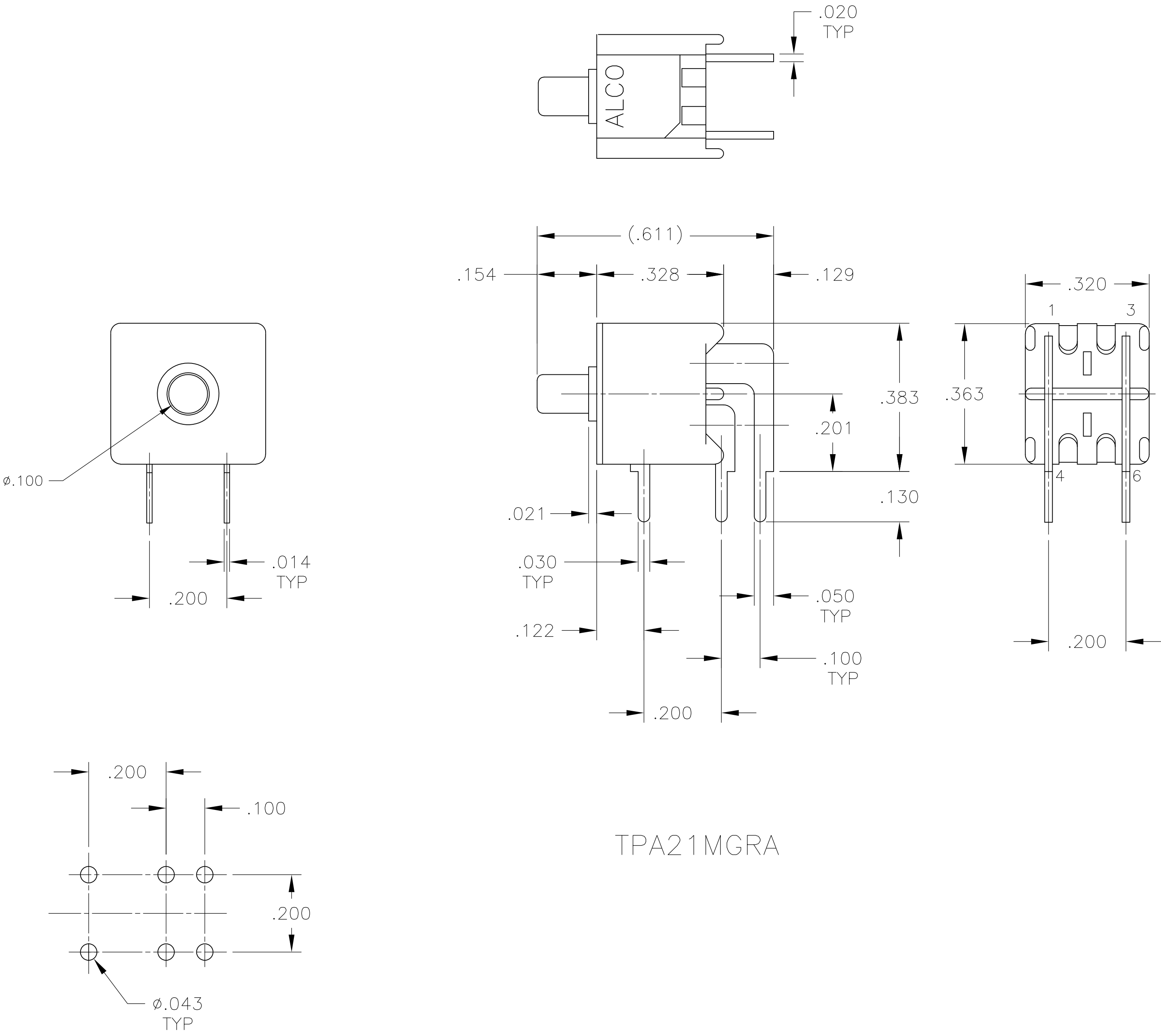
TPA11CGRA
TPA11FGRA



TPA21CCGRA
TPA21FFGRA



| | | | | | | |
|---|---|------------------|---------|---|--|--|
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| | | CHK M. ZITTO | 21JUL05 | | | |
| DIMENSIONS: INCHES | TOLERANCES UNLESS OTHERWISE SPECIFIED: | AP'D M. ZITTO | 21JUL05 | NAME | | |
| | | PRODUCT SPEC | | PUSHBUTTON SWITCH, TPA SERIES | | |
|  | 0. PLC ± . 1. PLC ± . 2. PLC ± . 3. PLC ± .010 4. PLC ± . ANGLES ± . | APPLICATION SPEC | | SIZE | | |
| | | — | | CAGE CODE | | |
| MATERIAL | FINISH | WEIGHT | | DRAWING NO | | |
| | | — | | RESTRICTED TO | | |
| CUSTOMER DRAWING | | SCALE 4:1 | | SHEET 3 OF 4 | | |
| | | | | REV A2 | | |

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



TPA21MGRA

PCB HOLE LAYOUT

| | | | | | |
|---|--|------------------|---------|---|--|
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| | | CHK M. ZITTO | 21JUL05 | | |
| DIMENSIONS: INCHES | TOLERANCES UNLESS OTHERWISE SPECIFIED: | AP'D M. ZITTO | 21JUL05 | NAME | |
| | | PRODUCT SPEC | | PUSHBUTTON SWITCH, TPA SERIES | |
|  | 0. PLC ± .010 1. PLC ± .010 2. PLC ± .010 3. PLC ± .010 4. PLC ± .010 ANGLES ± .010 FINISH | APPLICATION SPEC | | SIZE | |
| | | — | | CAGE CODE | |
| MATERIAL | | WEIGHT | | | |
| — | | — | | | |
| FINISH | | — | | | |
| — | | — | | | |
| CUSTOMER DRAWING | | SCALE | | | |
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| | | SHEET | | | |
| | | 4 of 4 | | | |
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| | | A2 | | | |

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