Print



Have a Question? Chat with a Product Information Specialist

What can we help you find?

Email

Products Industries Resources About TE My Account Innovation Support Center

Share

Quick Links

Pricing & Availability

Search for ToolingProduct Feature SelectorContact Us About This Product

MTA406NPC Product Details



MTA406NPC

TE Internal Number: 4-1437558-4



View 3D PDF

Toggle Switches

Always EU RoHS/ELV Compliant (Statement of Compliance)

Product Highlights:

- MTA Series
- Four Pole Double Throw Configuration (Pole-Throw)
- Current Rating = 6 A
- Mount Style = Through-Hole
- Termination Type = Printed Circuit, Vertical

View all Features

Request Sample

Buy Product

Add to My Part List

Documentation & Additional Information

Product Drawings:

TOGGLE SWITCH, MTA SERIES VERTICAL MOUNT (PDF, English)

Catalog Pages/Data Sheets:

• 2-1773458-6_GREEN_SERIES_SWITCHES (PDF, English)

Product Specifications:

None Available

Application Specifications:

None Available

Instruction Sheets:

None Available

CAD Files: (CAD Format & Compression Information)

- 2D Drawing (DXF, Version E)
- 3D Model (IGES, Version E)
- 3D Model (STEP, Version E)

Additional Information:
• Product Line Information

Find Similar Products

Additional Product Images:

• Dimensional Drawing

Related Products:

Tooling

Product Features (Please use the Product Drawing for all design activity)

Product Type Features:

- Series = MTA
- Termination Type = Printed Circuit, Vertical

Electrical Characteristics:

• Current Rating (A) = 6

Termination Features:

• Seal Type = Terminal Seal (Insert Molded)

Body Features:

- Mount Style = Through-Hole
- Bushing Style = Threaded
- Bushing Type = 1/4-40

Contact Features:

• Contact Plating = Gold Flash over Silver

Housing Features:

List all Documents

- Toggle Style = Baton Long
- Toggle Length (mm [in]) = 10.40 [0.410]
- Process Sealed = No
- UL Flammability Rating = UL 94V-0

Configuration Features:

- Configuration (Pole-Throw) = Four Pole Double Throw
- Operating Function = On None On

Industry Standards:

- RoHS/ELV Compliance = RoHS compliant, ELV compliant
- Lead Free Solder Processes = Wave solder capable to 240°C, Wave solder capable to 260°C, Wave solder capable to 265°C

RoHS/ELV Compliance History = Always was RoHS compliant

Other:

- Brand = Alcoswitch
- Comment = UL available when ordering consult factory.

Corporate Information

About TE Investors News Room Supplier Portal Careers

Terms & Conditions Privacy Policy Quick Links

Distributor Inventory
Product Cross Reference
Documents & Drawings

Product Compliance Support Center

Site Map

Customer Support

Email or Chat With Us Find a Phone Number Knowledge Base Manage Your Account

Keep Me Informed



© 2013 Tyco Electronics Corporation, a TE Connectivity Ltd. company. All Rights Reserved [-] Provide Website Feedback



RELEASED FOR PUBLICATION ALL RIGHTS RESERVED. C COPYRIGHT - By -

REVISIONS 03MAR11 PSK MW E3 REVISED PER ECO-11-005556

| 10 | |
|-----------------------|--|
| 3 | |
| 8 7 12 14 13 11 6 5 1 | |

NOT TO SCALE

ETE.

1 00779 **C**-1-1437558-0

SIZE CAGE CODE DRAWING NO

TE Connectivity

SCALE 2:1 SHEET 1 OF 3 REV E 3

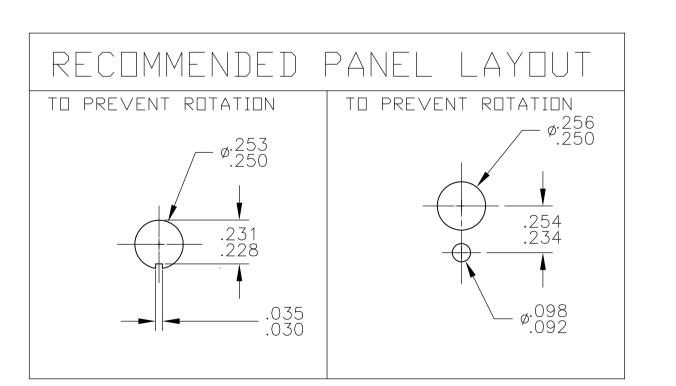
TOGGLE SWITCH, MTA SERIES

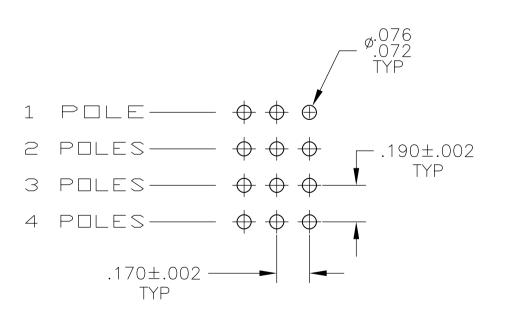
VERTICAL MOUNT

| 10 |
|------------------------------------|
| 9 |
| 4 |
| |
| (8)(7)(12)(14)(13)(11) $(6)(5)(1)$ |

| Materials | | | | | | | | |
|-----------|---------------------------|------------------------------|---|--|--|--|--|--|
| No. | Component name | Base material | Finish | | | | | |
| 1 | Housing | High temp, UL 94V-0, green | | | | | | |
| 2 | End terminal | silver clad copper alloy | 5 microinches min. gold | | | | | |
| 3 | Center terminal | copper alloy | 5 microinches min. gold | | | | | |
| 4 | Rocker contact | silver clad copper alloy | 5 microinches min. gold | | | | | |
| 5 | Actuator | Phenol resin, UL94 HB, black | | | | | | |
| 6 | Plunger | stainless steel | | | | | | |
| 7 | Spring | music wire | | | | | | |
| 8 | Toggle | brass | chrome or nickel | | | | | |
| 9 | Retainer | Polyamide, UL94 HB, black | | | | | | |
| 10 | Frame | cold rolled steel | zinc or nickel | | | | | |
| 11 | Bushing | brass | 100 microinches min. nickel over 10 microinches min. copper | | | | | |
| 12 | Mounting nuts (2) | brass | 200 microinches min. bright nickel | | | | | |
| 13 | Locating ring | cold rolled steel | zinc or nickel | | | | | |
| 14 | Internal tooth lockwasher | steel | zinc or nickel | | | | | |
| | | | | | | | | |

| | Specifications-see note 3 | | | | |
|-------------------------|--------------------------------|------------|------------|-----------|-----|
| Current rating UL & CSA | 6A @ 125 VAC (resistive) | | | | |
| | 3A @ 250 VAC (resistive) | | | | 7/8 |
| | 4A @ 28 VDC (resistive) | | | | /8 |
| Termination resistance | 20 milliohms max @ 2-4 VDC, 1A | | | | |
| Insulation resistance | 1,000 megohms min. | | | | |
| Withstanding voltage | 1,000 VAC | | | | |
| Travel | 24 + / -6 degrees | | | | 7/8 |
| Actuation force | .05 to 1.5 kgf | | | | 8 |
| Operating temperature | -20C to +85C | | | | |
| Storage temperature | -40C to +85C | | | | |
| Contact timing | break before make | | | | |
| Terminal seal | epoxy or insert molded | | | | |
| Durability | Parameter | 2 Position | 3 Position | Momentary | - |
| | mechanical (no load) | 150,000 | 100,000 | 80,000 | 7/8 |
| | 250 VAC (3A resistive) | 80,000 | 60,000 | 60,000 | |
| | 125 VAC (6A resistive) | 80,000 | 60,000 | 60,000 | 7/8 |
| | 28 VDC (4A resistive) | 60,000 | 50,000 | 40,000 | |





PC BOARD LAYOUT PC TERMINAL ONLY

- 1. TERMINAL NUMBERS ARE FOR REFERENCE ONLY AND DO NOT APPEAR ON THE SWITCHES.
- 2. EACH SWITCH SUPPLIED WITH THE FOLLOWING MOUNTING HARDWARE:
- (2) 1/4-40 UNS-2B HEX NUTS
- (1) INTERNAL TOOTH LOCKWASHER
- (1) LOCATING RING
- 5. WIRE LUG CONTACTS WILL ACCEPT 2 #20 AWG SOLID OR STRANDED WIRES.
- 6. CUSTOMER INSTALLED EXTERNAL JUMPER BETWEEN TERMINALS 2 AND 4 REQUIRED FOR 1 POLE 3 THROW FUNCTION.
- 7. CUSTOMER INSTALLED EXTERNAL JUMPERS BETWEEN TERMINALS 2 AND 4 AS WELL AS 8 AND 10 REQUIRED FOR 2 POLE 3 THROW FUNCTION.

8 OBSOLETE

| | Part Number | Alco Model | Poles | Throws | Function | Terminal | ALCU- T T T T T T T T T T T T T T T T T T T | ALCU 3 2 1 6 5 4 9 8 7 12 11 10 | ALCU- 3 2 1 6 5 4 9 8 7 12 11 10 | Comments | |
|--------------|----------------------------|------------|-------|--------|---------------|----------------|--|---|--|----------|---------|
| | 4-1437558-8 | MTA406PPC | 4 | 2 | ON OFF ON | PC | 2-3, 5-6, 8-9, 11-12 | Off | 2-1, 5-4, 8-7, 11-10 | | - |
| /8 | 4-1437558-7 | MTA406PAPC | | 3 | ON ON ON | PC | 5-6, 11-12 | 5-3, 11-9 | 5-1, 11-7 | note 7 | 1 |
| /8\ | 4-1437558-6 | MTA406PA | 2 | 3 | ON ON ON | Wire lug | 5-6, 11-12 | 5-3, 11-9 | 5-1, 11-7 | note 7 | |
| | 4-1437558-5 | MTA406P | 4 | 2 | ON OFF ON | Wire lug | 2-3, 5-6, 8-9, 11-12 | Off | 2-1, 5-4, 8-7, 11-10 | | |
| | 4-1437558-4 | MTA406NPC | 4 | 2 | ON ON | PC | 2-3, $5-6$, $8-9$, $11-12$ | | 2-1, 5-4, 8-7, 11-10 | | |
| | 4-1437558-3 | | 4 | 2 | ON ON | Wire lug | 2-3, 5-6, 8-9, 11-12 | | 2-1, 5-4, 8-7, 11-10 | | |
| /8 | 4-1437558-2 | | 3 | 2 | ON OFF(ON) | PC | 2-3, 5-6, 8-9 | Off | 2-1, 5-4, 8-7 | | - |
| /8\ | 4-1437558-1 | MTA306H | 3 | 2 | ON OFF(ON) | Wire lug | | Off | 2-1, 5-4, 8-7 | | _ |
| | 4-1437558-0 | | 3 | 2 | ON (ON) | PC | 2-3, 5-6, 8-9 | | 2-1, 5-4, 8-7 | | - |
| | 3-1437558-9 3-1437558-8 | | 3 | 2 | ON (ON) | Wire lug | <u>2-3, 5-6, 8-9</u> 2-3, 5-6, 8-9 | Off | 2-1, 5-4, 8-7 2-1, 5-4, 8-7 | | + |
| | 3-1437558-7 | | 3 | 2 2 | ON OFF ON | Wire lug | | Off | 2-1, 5-4, 8-7 | | - |
| | 3-1437558-6 | | | 2 | ON ON | PC PC | 2-3, 5-6, 8-9 | ——— | 2-1, 5-4, 8-7 | | - |
| - | 3-1437558-5 | | 3 | 2 | ON ON | Wire lug | | | 2-1, 5-4, 8-7 | | 1 |
| . L | 3-1437558-4 | | 2 | 2 | ON OFF(ON) | PC | 2-3, 5-6 | OFF | 2-1, 5-4 | | 1 |
| | 3-1437558-3 | | 1 | 3 | ON ON (ON) | Wire lug | | 5-3 | 5-1 | note 6 | |
| , l | 3-1437558-2 | | 2 | 2 | ON OFF(ON) | Wire lug | | OFF | 2-1, 5-4 | | |
| | 3-1437558-1 | | 2 | 2 | (ON) OFF (ON) | PC | 2-3, 5-6 | OFF | 2-1, 5-4 | | |
| /8 | 3-1437558-0 | MTA206SA | 1 | 3 | (ON) ON (ON) | Wire lug | | 5-3 | 5-1 | note 6 | |
| | 2-1437558-9 | MTA206S | 2 | 2 | (ON) OFF (ON) | Wire lug | | OFF | 2-1, 5-4 | | |
| | 2-1437558-8 | | | 2 | ON (ON) | PC | 2-3, 5-6 | | 2-1, 5-4 | | |
| | 2-1437558-7 | | 2 | 2 | ON (ON) | Wire lug | | | 2-1, 5-4 | | - |
| | 2-1437558-5 | | | 2 | ON OFF ON | PC | 2-3, 5-6 | OFF F 7 | 2-1, 5-4 | | - |
| \sim | 2-1437558-4 | |) 1 | 3 | NO NO NO | PC | 5-6 | 5-3 | 5-1 | note 6 | - |
| \leftarrow | 2-1437558-3 2-1437558-2 | | 2 | 3 2 | ON ON ON | Wire lug | | 5-3 OFF | 5-1 2-1, 5-4 | note 6 | - |
| | 2-1437558-1 | | | 2 | ON OFF ON ON | Wire lug PC | 2-3, 5-6 | | 2-1, 5-4 | | + |
| | 2-1437558-0 | | 2 | 2 | ON ON | Wire lug | | | 2-1, 5-4 | | - |
| | 1-1437558-9 | | | 2 | ON OFF(ON) | PC PC | 2-3 | OFF | 2-1 | | - |
| \sim | 1-1437558-8 | | 1 | 2 | ON OFF(ON) | Wire lug | | OFF | 2-1 | | |
| / 0 | 1-1437558-7 | | 1 | 2 | (ON) OFF (ON) | PC | 2-3 | OFF | 2-1 | | |
| | 1-1437558-6 | MTA106G | 1 | 2 | (ON) OFF (ON) | Wire lug | 2-3 | OFF | 2-1 | | |
| | 1-1437558-5 | MTA106FPC | 1 | 2 | ON (ON) | PC | 2-3 | | 2-1 | | |
| | 1-1437558-4 | MTA106F | 1 | 2 | ON (ON) | Wire lug | 2-3 | | 2-1 | | |
| | 1-1437558-3 | MTA106EPC | 1 | 2 | ON OFF ON | PC | 2-3 | Off | 2-1 | | |
| | 1-1437558-2 | | 1 | 2 | ON OFF ON | Wire lug | 2-3 | Off | 2-1 | | |
| | | | 1 | 2 | ON ON | PC | 2-3 | | 2-1 | | |
| /8 | | MTA106DUL | 1 | 2 | ON ON | Wire lug | 2-3 | | 2-1 | | - |
| | 1-1437558-0 | MTA106D | 1 | 2 | ON ON | Wire lug | 2-3 | — — — DWN | 2-1 29DEC03 | | <i></i> |

THIS DRAWING IS A CONTROLLED DOCUMENT.

TOLERANCES UNLESS OTHERWISE SPECIFIED:

APPLICATION SPEC

USTOMER DRAWING

0 PLC ± -1 PLC ± -2 PLC ± -3 PLC ± .005 4 PLC ± -

