

## Quick Reference Guide Green Pushbutton and Toggle Series Switches

The Green Series switch offering includes both pushbutton and toggle switches all rated to 6A/3A@125/250VAC and 4A@28VDC. The life expectancy depending on function (momentary or push on push off) and number of poles from 40,000 up to 80,000 cycles at full load this is accomplished due to silver slugs in the contact area. In addition to the silver slugs all contact surfaces are gold flashed this inhibits oxidation and also offers a very low initial contact resistance. The design also includes overmolded terminals which eliminate any voids which is possible with epoxy sealed terminals. The Green Series Toggle offer wide range of toggle bat options including a splash proof switch the MTE series and locking toggle MTL series. In the pushbuttons we offer our standard button style MPA plus a splash proof design MPE and our very robust actuator the MPG Mustang series.

## FEATURES AND BENEFITS

- Wire lug, PC terminals, right angle and vertical right angle offered
- Customer selected actuator cap size and color on MPA series
- MTE series splash proof toggle actuator
- MPE series sealed to IP65
- Entire series with overmolded terminals
- Actuator guards, decorative hardware, and silicone boot seals available


## PRODUCT APPLICATIONS

- Military/Aerospace
- Commercial
- Industrial
- Instrumentation
- Medical

| Typical Performance Characteristics |  |
| :---: | :---: |
| Contact configuration | spdt, dpdt, 3pdt, 4pdt |
| Contact timing | break-before-make |
| Contact rating, max | 6 A @ 125 VAC, 3 A @ 250 VAC |
| Electrical life (pushbutton only) | push on/push off: 30,000 cycles momentary: 20,000 cycles |
| Contact resistance, initial | 10 mohms max. |
| Insulation resistance | 1,000 MOhms min. |
| Dielectric strength | 1,500 Volts rms @ sea level |
| Actuator force | 4 to 20 N (400 to 2000 gf ) |
| Actuator travel | 3.44 mm (pushbuttons) <br> $24^{\circ} \sim 26^{\circ}$ (toggles) |
| Environmental Specifications |  |
| Operating temperature | $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
| Storage temperature | $-40^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
| Solder heat resistance | wave solder capable to $265^{\circ} \mathrm{C}$ |
| Seal | MPE switches IP65 overmolded terminals MTE series splash proof toggle actuator 'O' ring |
| Material Specifications |  |
| Contacts | copper alloy silver clad gold flash |
| Actuator | brass nickel plated |
| Terminals | copper alloy silver clad gold flash |
| Terminal seal | overmolded |
| Case | alkyd polyester (green) UL94-V-O |
| Frame | stainless steel |
| Support bracket (toggle only) | steel nickel plated |
| Spring (toggle only) | music wire |
| RoHS Directive 2002/95/EC | compliant |



## PUSHBUTTON SWITCHES PRODUCT KEY



PART NUMBERS

| Product key | Bushing | No. of poles | Function | Terminals | Material | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MPA106D | 1/4-40 3.4mm actuator | single pole | push-on/push-off | wire lug | RoHS compliant | 2-1437567-8 |
| MPA106F | 1/4-40 3.4mm actuator | single pole | momentary | wire lug | RoHS compliant | 2-1437567-9 |
| MPA106FPC | 1/4-40 3.4mm actuator | single pole | momentary | pcb | RoHS compliant | 3-1437567-0 |
| MPA206N | 1/4-40 3.4mm actuator | double pole | push-on/push-off | wire lug | RoHS compliant | 3-1437567-1 |
| MPA206NPC | 1/4-40 3.4mm actuator | double pole | push-on/push-off | pcb | RoHS compliant | 3-1437567-2 |
| MPA206R | 1/4-40 3.4mm actuator | double pole | momentary | wire lug | RoHS compliant | 3-1437567-3 |
| MPA206RPC | 1/4-40 3.4mm actuator | double pole | momentary | pcb | RoHS compliant | 3-1437567-4 |
| MPA306D | 1/4-40 3.4mm actuator | 3 poles | push-on/push-off | wire lug | RoHS compliant | 3-1437567-5 |
| MPA306F | 1/4-40 3.4mm actuator | 3 poles | momentary | wire lug | RoHS compliant | 3-1437567-6 |
| MPA406N | 1/4-40 3.4 mm actuator | 4 poles | push-on/push-off | wire lug | RoHS compliant | 3-1437567-7 |
| MPA406R | 1/4-40 3.4 mm actuator | 4 poles | momentary | wire lug | RoHS compliant | 3-1437567-8 |
| MPE106D | 1/4-40 3.4mm actuator with 'O' ring | single pole | push-on/push-off | wire lug | RoHS compliant | 4-1437567-2 |
| MPE106F | 1/4-40 3.4 mm actuator with 'O' ring | single pole | momentary | wire lug | RoHS compliant | 4-1437567-3 |
| MPE206N | 1/4-40 3.4mm actuator with 'O' ring | double pole | push-on/push-off | wire lug | RoHS compliant | 4-1437567-4 |
| MPE206R | 1/4-40 3.4mm actuator with 'O' ring | double pole | momentary | wire lug | RoHS compliant | 4-1437567-5 |
| MPE306F | 1/4-40 3.4 mm actuator with 'O' ring | 3 poles | momentary | wire lug | RoHS compliant | 4-1437567-6 |
| MPE406N | 1/4-40 3.4 mm actuator with 'O' ring | 4 poles | push-on/push-off | wire lug | RoHS compliant | 4-1437567-7 |
| MPE406R | 1/4-40 3.4mm actuator with 'O' ring | 4 poles | momentary | wire lug | RoHS compliant | 4-1437567-8 |
| MPG106D | 15/32-32 large actuator | single pole | push-on/push-off | wire lug | RoHS compliant | 4-1437567-9 |
| MPG106F | 15/32-32 large actuator | single pole | momentary | wire lug | RoHS compliant | 5-1437567-0 |
| MPG206N | 15/32-32 large actuator | double pole | push-on/push-off | wire lug | RoHS compliant | 5-1437567-1 |
| MPG206NPC | 15/32-32 large actuator | double pole | push-on/push-off | pcb | RoHS compliant | 5-1437567-2 |
| MPG206R | 15/32-32 large actuator | double pole | momentary | wire lug | RoHS compliant | 5-1437567-3 |
| MPG206RPC | 15/32-32 large actuator | double pole | momentary | pcb | RoHS compliant | 5-1437567-4 |
| MPG306D | 15/32-32 large actuator | 3 poles | push-on/push-off | wire lug | RoHS compliant | 5-1437567-5 |
| MPG306F | 15/32-32 large actuator | 3 poles | momentary | wire lug | RoHS compliant | 5-1437567-6 |
| MPG406N | 15/32-32 large actuator | 4 poles | push-on/push-off | wire lug | RoHS compliant | 5-1437567-7 |
| MPG406R | 15/32-32 large actuator | 4 poles | momentary | wire lug | RoHS compliant | 5-1437567-8 |



PART NUMBERS

| Product key | Toggle | Bushing | Poles | Terminations | Material | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MTA106D | . 410 round | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 1-1437558-0 |
| MTA106DPC | . 410 round | 1/4-40 bushing | 1 | pc board | RoHS Compliant | 1-1437558-1 |
| MTA106E | . 410 round | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 1-1437558-2 |
| MTA106EPC | . 410 round | 1/4-40 bushing | 1 | pc board | RoHS Compliant | 1-1437558-3 |
| MTA106F | . 410 round | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 1-1437558-4 |
| MTA106FPC | . 410 round | 1/4-40 bushing | 1 | pc board | RoHS Compliant | 1-1437558-5 |
| MTA106G | . 410 round | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 1-1437558-6 |
| MTA106GPC | . 410 round | 1/4-40 bushing | 1 | pc board | RoHS Compliant | 1-1437558-7 |
| MTA206N | . 410 round | 1/4-40 bushing | 2 | wire lug | RoHS Compliant | 2-1437558-0 |
| MTA206NPC | . 410 round | 1/4-40 bushing | 2 | pc board | RoHS Compliant | 2-1437558-1 |
| MTA206P | . 410 round | 1/4-40 bushing | 2 | wire lug | RoHS Compliant | 2-1437558-2 |
| MTA206PPC | . 410 round | 1/4-40 bushing | 2 | pc board | RoHS Compliant | 2-1437558-5 |
| MTA206R | . 410 round | 1/4-40 bushing | 2 | wire lug | RoHS Compliant | 2-1437558-7 |
| MTA206RPC | . 410 round | 1/4-40 bushing | 2 | pc board | RoHS Compliant | 2-1437558-8 |
| MTA206S | . 410 round | 1/4-40 bushing | 2 | wire lug | RoHS Compliant | 2-1437558-9 |
| MTA206SPC | . 410 round | 1/4-40 bushing | 2 | pc board | RoHS Compliant | 3-1437558-1 |
| MTA306D | . 410 round | 1/4-40 bushing | 3 | wire lug | RoHS Compliant | 3-1437558-5 |
| MTA306DPC | . 410 round | 1/4-40 bushing | 3 | pc board | RoHS Compliant | 3-1437558-6 |
| MTA306E | . 410 round | 1/4-40 bushing | 3 | wire lug | RoHS Compliant | 3-1437558-7 |
| MTA306EPC | . 410 round | 1/4-40 bushing | 3 | pc board | RoHS Compliant | 3-1437558-8 |
| MTA306F | . 410 round | 1/4-40 bushing | 3 | wire lug | RoHS Compliant | 3-1437558-9 |
| MTA306FPC | . 410 round | 1/4-40 bushing | 3 | pc board | RoHS Compliant | 4-1437558-0 |
| MTA406N | . 410 round | 1/4-40 bushing | 4 | wire lug | RoHS Compliant | 4-1437558-3 |
| MTA406NPC | . 410 round | 1/4-40 bushing | 4 | pc board | RoHS Compliant | 4-1437558-4 |
| MTA406P | . 410 round | 1/4-40 bushing | 4 | wire lug | RoHS Compliant | 4-1437558-5 |
| MTA406PPC | . 410 round | 1/4-40 bushing | 4 | pc board | RoHS Compliant | 4-1437558-8 |

PART NUMBERS (continued)

| Product key | Toggle | Bushing | Poles | Terminations | Material | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MTB106D | . 600 round, w plastic tip | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 6-1437558-2 |
| MTB106E | . 600 round, w plastic tip | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 6-1437558-3 |
| MTB206N | . 600 round, w plastic tip | 1/4-40 bushing | 2 | wire lug | RoHS Compliant | 6-1437558-4 |
| MTB206P | . 600 round, w plastic tip | 1/4-40 bushing | 2 | wire lug | RoHS Compliant | 6-1437558-5 |
| MTB306D | . 600 round, w plastic tip | 1/4-40 bushing | 3 | wire lug | RoHS Compliant | 6-1437558-6 |
| MTB406N | . 600 round, w plastic tip | 1/4-40 bushing | 4 | wire lug | RoHS Compliant | 6-1437558-7 |
| MTE106D | . 410 round | 1/4-40, O-ring seal | 1 | wire lug | RoHS Compliant | 6-1437558-8 |
| MTE106E | . 410 round | 1/4-40, O-ring seal | 1 | wire lug | RoHS Compliant | 6-1437558-9 |
| MTE106F | . 410 round | 1/4-40, O-ring seal | 1 | wire lug | RoHS Compliant | 7-1437558-0 |
| MTE106G | . 410 round | 1/4-40, O-ring seal | 1 | wire lug | RoHS Compliant | 7-1437558-1 |
| MTE206N | . 410 round | 1/4-40, O-ring seal | 2 | wire lug | RoHS Compliant | 7-1437558-2 |
| MTE206P | . 410 round | 1/4-40, O-ring seal | 2 | wire lug | RoHS Compliant | 7-1437558-3 |
| MTE206R | . 410 round | 1/4-40, O-ring seal | 2 | wire lug | RoHS Compliant | 7-1437558-5 |
| MTE206S | 410 round | 1/4-40, O-ring seal | 2 | wire lug | RoHS Compliant | 7-1437558-6 |
| MTE306D | . 410 round | 1/4-40, O-ring seal | 3 | wire lug | RoHS Compliant | 7-1437558-8 |
| MTE306E | . 410 round | 1/4-40, O-ring seal | 3 | wire lug | RoHS Compliant | 7-1437558-9 |
| MTE406N | . 410 round | 1/4-40, O-ring seal | 4 | wire lug | RoHS Compliant | 8-1437558-0 |
| MTE406P | . 410 round | 1/4-40, O-ring seal | 4 | wire lug | RoHS Compliant | 8-1437558-1 |
| MTF106D | . 485 flat | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 8-1437558-3 |
| MTF106E | 485 flat | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 8-1437558-4 |
| MTF106F | . 485 flat | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 8-1437558-5 |
| MTF106G | . 485 flat | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 8-1437558-6 |
| MTF206S | . 485 flat | 1/4-40 bushing | 2 | wire lug | RoHS Compliant | 9-1437558-6 |
| MTF306D | . 485 flat | 1/4-40 bushing | 3 | wire lug | RoHS Compliant | 1437559-6 |
| MTF406N | . 485 flat | 1/4-40 bushing | 4 | wire lug | RoHS Compliant | 1437559-8 |
| MTG106D | . 452 large diam. round | 15/32 bushing | 1 | wire lug | RoHS Compliant | 1-1437559-1 |
| MTG106E | . 452 large diam. round | 15/32 bushing | 1 | wire lug | RoHS Compliant | 1-1437559-2 |
| MTG106F | . 452 large diam. round | 15/32 bushing | 1 | wire lug | RoHS Compliant | 1-1437559-3 |
| MTG106G | . 452 large diam. round | 15/32 bushing | 1 | wire lug | RoHS Compliant | 1-1437559-4 |
| MTG206N | . 452 large diam. round | 15/32 bushing | 2 | wire lug | RoHS Compliant | 1-1437559-8 |
| MTG206P | . 452 large diam. round | 15/32 bushing | 2 | wire lug | RoHS Compliant | 2-1437559-0 |
| MTG206R | . 452 large diam. round | 15/32 bushing | 2 | wire lug | RoHS Compliant | 2-1437559-2 |
| MTG206S | . 452 large diam. round | 15/32 bushing | 2 | wire lug | RoHS Compliant | 2-1437559-3 |
| MTG306D | . 452 large diam. round | 15/32 bushing | 3 | wire lug | RoHS Compliant | 2-1437559-8 |
| MTG306E | . 452 large diam. round | 15/32 bushing | 3 | wire lug | RoHS Compliant | 2-1437559-9 |
| MTG406N | . 452 large diam. round | 15/32 bushing | 4 | wire lug | RoHS Compliant | 3-1437559-1 |
| MTG406P | . 452 large diam. round | 15/32 bushing | 4 | wire lug | RoHS Compliant | 3-1437559-2 |
| MTL106D | locking | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 3-1437559-4 |
| MTL106E | locking | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 3-1437559-5 |
| MTL206N | locking | 1/4-40 bushing | 2 | wire lug | RoHS Compliant | 3-1437559-7 |
| MTL206P | locking | 1/4-40 bushing | 2 | wire lug | RoHS Compliant | 3-1437559-9 |
| MTL206S | locking | 1/4-40 bushing | 2 | wire lug | RoHS Compliant | 4-1437559-1 |
| MTL306D | locking | 1/4-40 bushing | 3 | wire lug | RoHS Compliant | 4-1437559-2 |
| MTL306E | locking | 1/4-40 bushing | 3 | wire lug | RoHS Compliant | 4-1437559-3 |
| MTL406N | locking | 1/4-40 bushing | 4 | wire lug | RoHS Compliant | 4-1437559-4 |
| MTM106DPC | . 270 round | 1/4-40 bushing | 1 | pc board | RoHS Compliant | 4-1437559-6 |
| MTM106EPC | . 270 round | 1/4-40 bushing | 1 | pc board | RoHS Compliant | 4-1437559-7 |
| MTM106FPC | . 270 round | 1/4-40 bushing | 1 | pc board | RoHS Compliant | 4-1437559-8 |
| MTM206NPC | . 270 round | 1/4-40 bushing | 2 | pc board | RoHS Compliant | 4-1437559-9 |
| MTM306DPC | . 270 round | 1/4-40 bushing | 3 | pc board | RoHS Compliant | 5-1437559-3 |
| MTM406NPC | . 270 round | 1/4-40 bushing | 4 | pc board | RoHS Compliant | 5-1437559-4 |
| MTL106D | locking | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 3-1437559-4 |
| MTL106E | locking | 1/4-40 bushing | 1 | wire lug | RoHS Compliant | 3-1437559-5 |
| MTL206N | locking | 1/4-40 bushing | 2 | wire lug | RoHS Compliant | 3-1437559-7 |
| MTL206P | locking | 1/4-40 bushing | 2 | wire lug | RoHS Compliant | 3-1437559-9 |
| MTL206S | locking | 1/4-40 bushing | 2 | wire lug | RoHS Compliant | 4-1437559-1 |
| MTL306D | locking | 1/4-40 bushing | 3 | wire lug | RoHS Compliant | 4-1437559-2 |
| MTL306E | locking | 1/4-40 bushing | 3 | wire lug | RoHS Compliant | 4-1437559-3 |
| MTL406N | locking | 1/4-40 bushing | 4 | wire lug | RoHS Compliant | 4-1437559-4 |
| MTM106DPC | . 270 round | 1/4-40 bushing | 1 | pc board | RoHS Compliant | 4-1437559-6 |
| MTM106EPC | . 270 round | 1/4-40 bushing | 1 | pc board | RoHS Compliant | 4-1437559-7 |
| MTM106FPC | . 270 round | 1/4-40 bushing | 1 | pc board | RoHS Compliant | 4-1437559-8 |
| MTM206NPC | . 270 round | 1/4-40 bushing | 2 | pc board | RoHS Compliant | 4-1437559-9 |
| MTM306DPC | . 270 round | 1/4-40 bushing | 3 | pc board | RoHS Compliant | 5-1437559-3 |
| MTM406NPC | . 270 round | 1/4-40 bushing | 4 | pc board | RoHS Compliant | 5-1437559-4 |

## How to Specify in a Switch

## Electrical Considerations

Voltage of Applications: $\qquad$ Current of Application: $\qquad$
Circuitry Configuration: Number of Poles: $\qquad$ Number of Throws: $\qquad$
Number of Operations anticipated: $\qquad$
Agency Approvals or Listings Desired: $\qquad$

## Mechaniclal Considerations



Product Processing Considerations
Anticipated Soldering Process: $\qquad$ Hand $\qquad$ Wave $\qquad$ SMT $\qquad$ Other

## FOR MORE INFORMATION

## TE Technical Support Center

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+49 (0) 6251-133-1999
UK: $\quad+44$ (0) 800-267666
France: $\quad+33$ (0) 1-3420-8686
Netherlands: $\quad+31$ (0) 73-6246-999
China: $\quad+86(0)$ 400-820-6015

Part numbers in this brochure are RoHS Compliant*, unless marked otherwise.
*as defined www.te.com/leadfree

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[^0][^1] Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for Toggle Switches category:
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8A1-C-222 60012L 6006L 6663 7101MD9V30GE 7101SPDV30BE 7103SDV30BE 7105D 7108P3YAV2BE 71YY50282
7201MD9AVBE 7301 K 38 7306K36 7310 K 36 7314K36 7506 K 4 7592K6 7691 K 14 7700K1 8396 K 108 8824K14 8828K13 G2VX G3VX PS83-121G A101MD9AB04 A101SD9AB04 A101SDCQ04 A103SD9AQ04 A107TZB04 A123P32YZQ A123S1YZG A127S1YCQ 1-1825192-0 A131S1YZQ A201SCWZB04 A207SYCB04 A208J61ZQ0004 A221K12KAG A221S1YZQ A221T1TCQ A232K12KZQ A232M1YCQ A323S1CWZQ A423S1CWZG-M8 A423S1YZQ 12149A-3V 12156AX408 12147AGKX679 12149AD2G0383VX408


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