

Product Range



Rocker & Paddle Switches

- **Rocker & Paddle Switches for Panel Mounting:**
F, TRD and Gemini Series
- **Rocker & Paddle Switches for PCB Mounting:**
Gemini Series

Main features:

- Sealed or unsealed versions
- Various switch functions
- Gold or silver contacts
- LED illumination available (also bi-color)
- Multiple rocker/paddle colors available
- Beveled frames available



F Series, Power Rocker, Panel Mounting, 6Apage F2



TRD Series, Rocker/Paddlepage F4



Gemini A Series Rocker/Paddlepage F7



Gemini AE Series Rocker/Paddlepage F17

F Series, Rocker/Paddle, Panel Mounting, 6A

Features

- Wide range switch functions available
- Terminals are gold-flashed to prevent oxidation and for ease of soldering



Typical performance characteristics

Number of poles 1 to 4 pole
 Switch functions ON-ON, ON-(ON), ON-OFF-ON, ON-ON-ON, ON-OFF-(ON), (ON)-OFF-(ON)
 Contact rating 6 A @250 VAC, 6 A @125 VAC; gold contact: 0,4 VA max 20 V AC/DC
 Electrical life 25,000 to 50,000 cycles
 Mechanical life 50,000 to 100,000 cycles
 Contact resistance max 10 mOhm
 Insulation resistance min 1,000 MOhm
 Dielectric strength 1,000 VAC for 1 min
 Actuation force max 19,6 N
 Panel cut-out Ø 6,2 mm
 Standards and specs UL, CSA

Environmental specification

Operating temperature -20 to +70°C
 Storage temperature -20 to +70°C
 Vibration resistance 1,5 mm 10-55 Hz
 Shock resistance 50 g for 11±1 msec
 Terminal strength 24,5 N

Material specifications

Contacts brass silver alloy finished
 Toggle brass chromium plated
 Terminals brass plate
 Case phenol resin
 Cover steel zinc plated
 Seal rubber seal, insert molded rubber
 RoHS compliance compliant

Rocker & Paddle Switches

Product key

Typical product key

F L N 1 9 red 04

Type
F F Series power rocker switch

Model
L snap-in lever & rocker

Switch function & poles

| | |
|----------------|----------------|
| 1 pole | 2 pole |
| D ON-ON | N ON-ON |

Actuator

| | |
|----------------------|-----------------------|
| 1 long rocker | 2 small rocker |
|----------------------|-----------------------|

Terminal type
9 leadwire hooking type

Contact material

| | |
|---------------------|---------------|
| blank silver | G gold |
|---------------------|---------------|

Rocker color

| | | |
|----------------|--------------------|--------------------|
| red red | black black | white white |
|----------------|--------------------|--------------------|

Material
04 RoHS compliant

F Series, Rocker/Paddle, Panel Mounting, 6A (Continued)

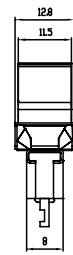
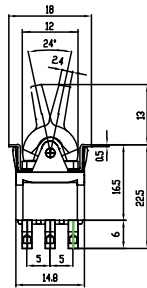
Function

| Function | Poles | On | On | On | On |
|----------|-------|----|----|----------|----------|
| D | 1 | On | On | 1-2 | 2-3 |
| N | 2 | On | On | 1-2, 4-5 | 2-3, 5-6 |

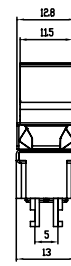
Off indicates a mechanical position with no electrical connection
 (On) indicates momentary connection
 None indicates no mechanical position

Actuator

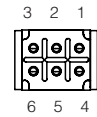
Code 1 long rocker



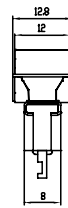
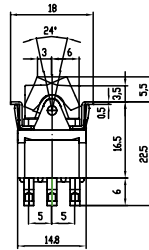
1 pole



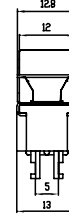
2 pole



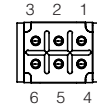
Code 2 small rocker



1 pole

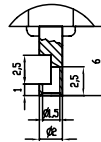


2 pole



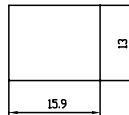
Terminal

Leadwire hooking type



Mounting

Panel Cutout thickness 1 to 2.5mm



| Product key | Poles | Switch func. | Actuator | Act. Color | Terminal | Contacts | Material | Part Number |
|--------------|---------|--------------|--------------|------------|-----------------------|----------|----------------|-------------|
| FLD19black04 | 1 pole | On - On | long rocker | black | leadwire hooking type | silver | RoHS compliant | 3-6437630-2 |
| FLD29black04 | | | small rocker | | | | | 2-6437630-9 |
| FLN19black04 | 2 poles | | long rocker | black | | | | 3-6437630-7 |
| FLN19red04 | | | | red | | | | 2-6437630-7 |
| FLN19white04 | | | | white | | | | 2-6437630-6 |
| FLN29black04 | | | small rocker | black | | | | 2-6437630-5 |
| FLN29red04 | | | | red | | | | 4-6437630-7 |
| FLN29white04 | | | | white | | | | 2-6437630-3 |

TRD Series, Rocker/Paddle

Features

- Wire lug, quick connect, or PC terminals
- LED both single and bi-colored available
- Entire series epoxy sealed terminals



Typical performance characteristics

Contact configuration SPST, DPDT
 Contact timing break-before-make
 Contact rating max 3 A @ 125 VAC with silver Option 3, 0.4 VA @ 20 VDC gold option 1
 Electrical life 2 Pos.: 20,000 cycles @ full rated 3 A load
 80,000 cycles @ 0.4 VA
 3 Pos.: 10,000 cycles @ full rated 3 A load
 60,000 cycles @ 0.4 VA
 Initial contact resistance max.20 mOhms
 Insulation resistance 1,000 MOhms min. @ 500 VDC
 Dielectric strength 500 Volts rms @ sea level

Environmental specification

Operating temperature -20°C to +80°C
 Storage temperature -45°C to +93°C
 Solder heat resistance wave solder capable to 265°C
 hand solder max. 316°C for less than 5 seconds
 with switch in the closed position
 Seal epoxy sealed terminals

Material specifications

Contacts movable copper alloy w/silver inlay or gold plated
 Actuator brass nickel plated
 Terminals/fixed contacts copper alloy w/silver inlay or gold plated
 Housing/beveled frame polyamide, black matte finish
 Terminal seal epoxy
 RoHS Directive 2002/95/EC compliant

Rocker & Paddle Switches


| Product key | Typical product key | | TRD | 1 | 3 | D | 1 | 0 | WL | 04 | | | | | | | | | | | | | | | |
|-------------------------|---|--------------------------------------|--------------------|---|--------------------|---------|---------|-----------------------|-------------|-------------|--|-----------|-----------------|--|-----------------|--|--|--|--|--|--|--|--|--|--|
| Type | TRD Rocker/Paddle Switch | | | | | | | | | | | | | | | | | | | | | | | | |
| Number of poles | 1 single pole | 2 double pole | | | | | | | | | | | | | | | | | | | | | | | |
| Rating | 1 0.4 VA @20VDC (Gold) | 3 3A @ 125VAC or 28VDC (Silver) | | | | | | | | | | | | | | | | | | | | | | | |
| Function | <table border="0"> <tr> <td>single pole</td> <td></td> <td>double pole</td> </tr> <tr> <td>D on-on</td> <td>N on-on</td> <td></td> </tr> <tr> <td>E on-off-on</td> <td>P on-off-on</td> <td></td> </tr> <tr> <td>F on-(on)</td> <td>S (on)-off-(on)</td> <td></td> </tr> <tr> <td>G (on)-off-(on)</td> <td></td> <td></td> </tr> </table> | | single pole | | double pole | D on-on | N on-on | | E on-off-on | P on-off-on | | F on-(on) | S (on)-off-(on) | | G (on)-off-(on) | | | | | | | | | | |
| single pole | | double pole | | | | | | | | | | | | | | | | | | | | | | | |
| D on-on | N on-on | | | | | | | | | | | | | | | | | | | | | | | | |
| E on-off-on | P on-off-on | | | | | | | | | | | | | | | | | | | | | | | | |
| F on-(on) | S (on)-off-(on) | | | | | | | | | | | | | | | | | | | | | | | | |
| G (on)-off-(on) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Actuator | 1 rocker | 2 paddle | | | | | | | | | | | | | | | | | | | | | | | |
| Actuator color | 0 black | 2 red | | | | | | | | | | | | | | | | | | | | | | | |
| Terminals | WL wire lug | QC quick connect | | | | | | | | | | | | | | | | | | | | | | | |
| Mount | blank 11.91 mm (15/32") | | | | | | | | | | | | | | | | | | | | | | | | |
| LED illumination | blank none | LR LED integral w/rocker (TRD1 only) | | | | | | | | | | | | | | | | | | | | | | | |
| LED color | 2 red | 5 green | | | | | | 25 bi-color red/green | | | | | | | | | | | | | | | | | |
| Material | blank RoHS compliant | 04 RoHS compliant | | | | | | | | | | | | | | | | | | | | | | | |

TRD Series, Rocker/Paddle (Continued)

Function




Codes 1, 2 1 and 2 pole



1 Single pole

| Function | 1-2-3 | 1-2-3 | 1-2-3 |
|---------------------|-------|-------|-------|
| D | On | None | On |
| E | On | Off | On |
| F | On | None | (On) |
| G | (On) | Off | (On) |
| Terminals connected | 2 - 3 | --- | 1 - 2 |



2 Double pole

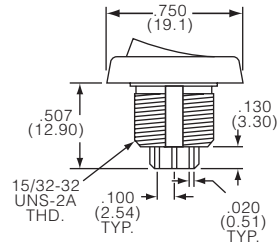
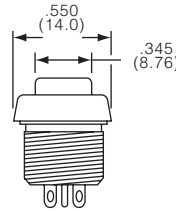
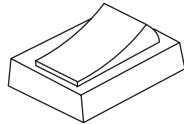
| Function | 1-2-3 | 1-2-3 | 1-2-3 |
|---------------------|-------|-------|-------|
| N | On | None | On |
| P | On | Off | On |
| S | (On) | Off | (On) |
| Terminals connected | 2 - 3 | --- | 1 - 2 |
| | 5 - 6 | --- | 4 - 5 |

Off mechanical position, no electrical connection
 (On) momentary mechanical position and electrical connection
 None no mechanical position

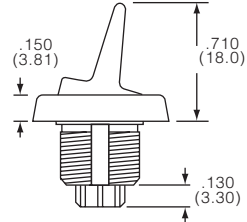
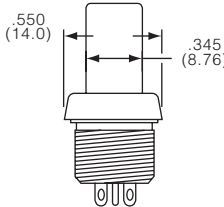
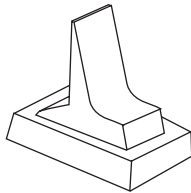
Actuator



1 rocker



2 paddle

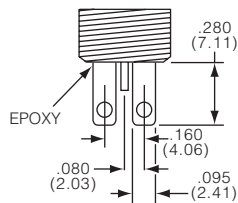


Terminal

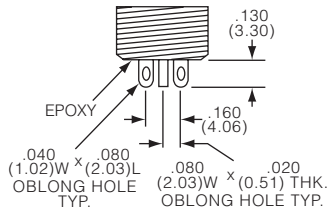


QC, WL

QC, quick connect



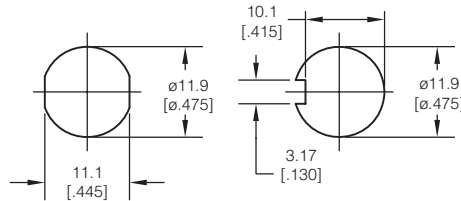
WL, wire lug



TRD Series, Rocker/Paddle (Continued)



blank 15/32" round hole



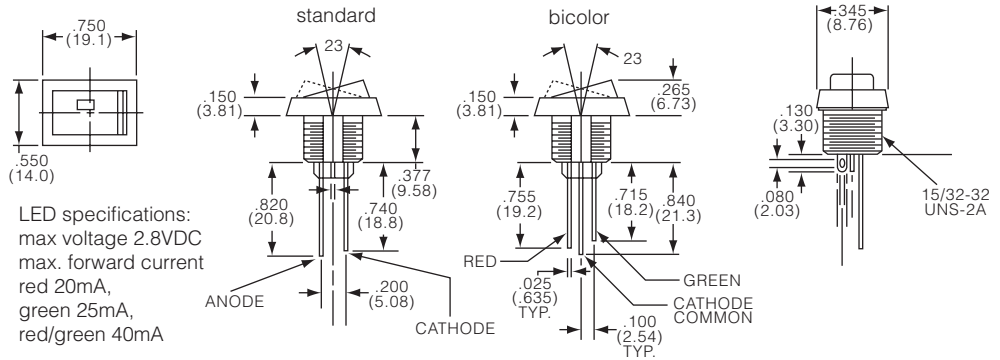
Standard TRD bushing will mount in any hole shown. Recommended panel thickness: .030" to .250". One hex nut, one internal tooth lock washer supplied



LR integral w/rocker (TRD1 only)



TRD11D10WLLR



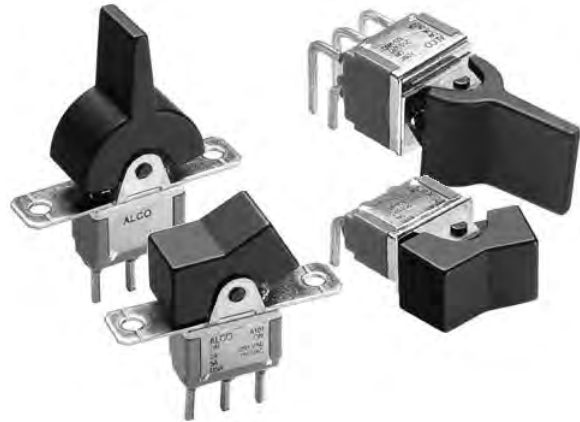
LED specifications:
max voltage 2.8VDC
max. forward current
red 20mA,
green 25mA,
red/green 40mA

| Product key | Poles | Rating | Function | Actuator | Act. color | Terminals | LED | LED color | Material | Part Number |
|------------------|--------|----------|---------------|----------|------------|---------------|----------|-----------|-----------|-------------|
| TRD11D10WL | single | 0.4 VA | on-on | rocker | black | wire | none | none | RoHS | 4-1437595-1 |
| TRD11D10WLLR504 | pole | @ 20VDC | | | | lug | integral | green | compliant | 1825424-1 |
| TRD11F10QCLR204 | | gold | on-(on) | | | quick c. | | red | | 1825425-1 |
| TRD11F10WL | | | | | | wire | none | none | | 5-1437595-2 |
| TRD11G10WL | | | (on)-off-(on) | | | lug | | | | 5-1437595-6 |
| TRD13D10QC04 | | 3 A | on-on | | | quick c. | | | | 1825422-1 |
| TRD13D10WL04 | | @ 125VAC | | | | wire | | | | 1825420-1 |
| TRD13D10WLLR204 | | or 28VDC | | | | lug | integral | red | | 1825426-1 |
| TRD13D10WLLR2504 | | silver | | | | | | bi-color | | 1825426-2 |
| TRD13D10WLLR504 | | | | | | | | green | | 1825426-3 |
| TRD13E10WLLR204 | | | on-off-on | | | | | red | | 1825426-4 |
| TRD13F10QC04 | | | on-(on) | | | quick connect | none | none | | 1825422-2 |
| TRD13F10QCLR204 | | | | | | connect | integral | red | | 1825427-1 |
| TRD13F10WL04 | | | | | | wire | none | none | | 1825420-2 |
| TRD13G10WL04 | | | (on)-off-(on) | | | lug | | | | 1825420-3 |
| TRD13G10WLLR204 | | | | | | | integral | red | | 1825426-5 |
| TRD21N10WL | double | 0.4 VA | on-on | | | | none | none | | 1437596-3 |
| TRD21S10WL | | gold | (on)-off-(on) | | | | | | | 1-1437596-4 |
| TRD23N10QC04 | | 3 A | on-on | | | quick c. | | | | 1825423-1 |
| TRD23N10WL04 | | @ 125VAC | | | | wire | | | | 1825421-1 |
| TRD23P10WL04 | | or 28VDC | on-off-on | | | lug | | | | 1825421-2 |
| TRD23S10WL04 | | silver | (on)-off-(on) | | | | | | | 1825421-3 |

Gemini A Series Rocker/Paddle

Features

- Multiple actuator colors available
- G and Q contacts UL® recognition



Typical performance characteristics

Contact configuration SPST, DPST
 Contact timing break before make
 Contact rating max. B contacts: 0.4 VA @ 20 V max. AC or DC
 G contacts: 0.4 VA @ 20 V max. AC or DC or
 5 A @ 120 VAC or 28 VDC (resistive) or
 2 A @ 250 VAC (resistive)
 Q contacts: 5 A @ 120 VAC or 28 VDC (resistive) or
 2 A @250 VAC (resistive)
 Electrical life 6,000 cycles at rated load
 Mechanical life 40,000 cycles
 Contact resistance max. 10 mOhms initial @ 2-4 VDC, 100 mA
 Insulation resistance min. 1,000 MOhms
 Dielectric strength 1,000 Vrms at sea level
 Standards and specs UL® recognition on G & Q contacts

Environmental specification

Operating temperature -30°C to 85°C
 Storage temperature -40°C to 85°C
 Solder heat resistance wave solder capable to 265°C

Material specifications

Contacts & terminals B contacts: copper alloy w/ gold over nickel
 G contacts: copper alloy w/ silver
 Q contacts: copper alloy w/ gold over silver
 Actuator phenolic
 Base DAP® UL94 V-O
 Frame stainless steel
 Seal epoxy UL94 V-1
 RoHS Directive 2002/95/EC compliant

| Product key | | Typical product key | | | | | | | | | |
|--|-------------------------------|---------------------|---------------------------|-----------|----------------------|---|----------|----------|--|--|-----------|
| | | A | 1 | 01 | J1 | A | Q | 0 | | | 04 |
| Type | A Rocker/Paddle Switch | | | | | | | | | | |
| Number of poles | 1 single pole | | 2 double pole | | | | | | | | |
| Function | 01 On-On | | 07 On-Off-(On) | | 13 On-On-(On) | | | | | | |
| | 03 On-Off-On | | 08 On-(On) | | | | | | | | |
| | 05 (On)-Off-(On) | | 11 On-On-On | | | | | | | | |
| Actuator | | | | | | | | | | | |
| Rocker | | | | | | Paddle | | | | | |
| J1 small | | | | | | J2 small | | | | | |
| J3 large | | | | | | J4 large | | | | | |
| J50 snap-in | | | | | | J60 snap-in | | | | | |
| J51 snap-in w/beveled frame | | | | | | J61 snap-in w/beveled frame | | | | | |
| J52 snap-in w/beveled frame and LED | | | | | | J62 snap-in w/beveled frame and LED | | | | | |
| Terminals | | | | | | | | | | | |
| A right angle | | | | | | V3 vertical with support bracket .620(15.75) | | | | | |
| AV2 vertical R/A | | | | | | Z wire lug | | | | | |
| C P.C. | | | | | | Z3 quick connect | | | | | |
| Contacts | B gold | | G gold over silver | | Q silver | | | | | | |
| Actuator color | 0 black (std.) | | 3 orange | | 6 blue | | | | | | |
| | 1 brown | | 4 yellow | | 8 gray | | | | | | |
| | 2 red | | 5 green | | 9 white | | | | | | |
| Beveled frame color | 0 black (std.) | | 3 orange | | 6 blue | | | | | | |
| | 1 brown | | 4 yellow | | 8 gray | | | | | | |
| | 2 red | | 5 green | | 9 white | | | | | | |
| Material | 04 RoHS compliant | | | | | | | | | | |

Gemini A Series Rocker/Paddle (Continued)

Function



Codes 01, 03, 05, 07, 08, 11 and 13

| Code | Positions | | | |
|------|---------------------|-------|-------|-------|
| 01 | 2 positions | On | None | On |
| 08 | 2 positions | On | None | (On) |
| | Term. conn. | 2 - 3 | --- | 1 - 2 |
| 03 | 3 positions | On | Off | On |
| 05 | | (On) | Off | (On) |
| 07 | | On | Off | (On) |
| | Terminals connected | 2 - 3 | --- | 1 - 2 |
| | | 5 - 6 | --- | 4 - 5 |
| 11 | 3 positions | On | On | On |
| 13 | | On | On | (On) |
| | Terminals connected | 2 - 3 | 1 - 2 | 1 - 2 |
| | | 5 - 6 | 5 - 6 | 4 - 5 |

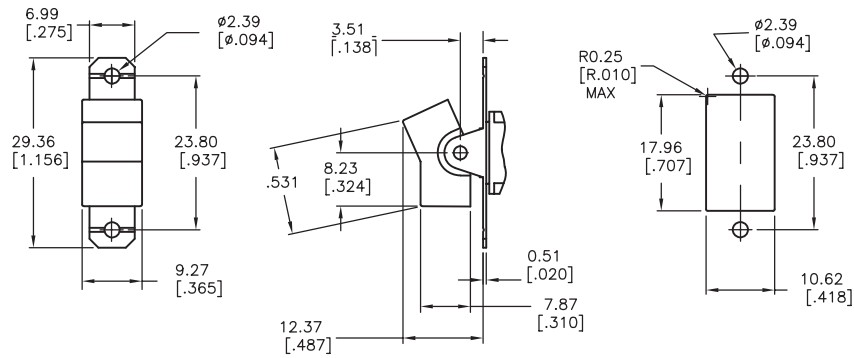
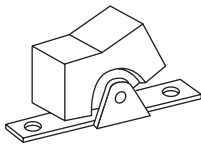
Off
(On)
None

mechanical position, no electrical connection
momentary mechanical position and electrical connection
no mechanical position

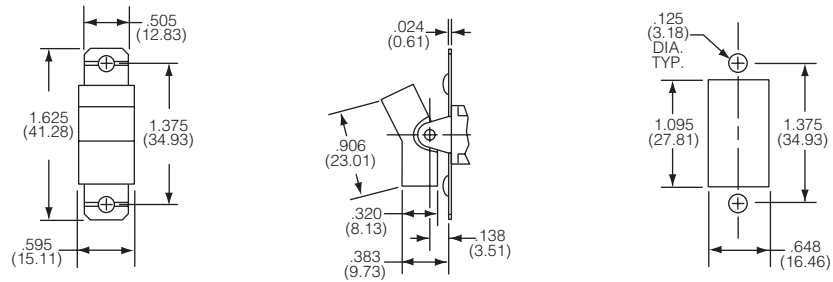
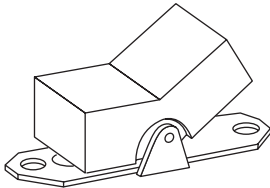
Actuator



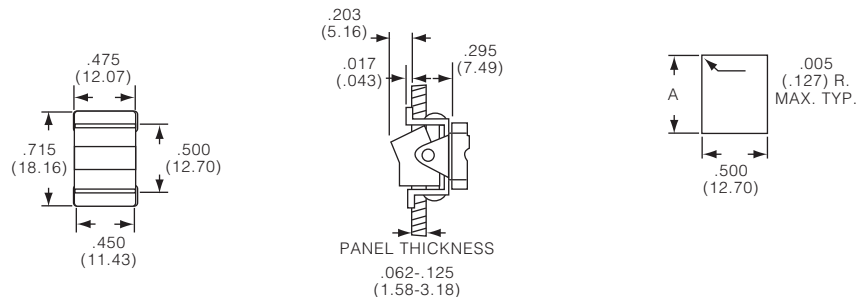
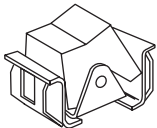
J1 rocker, small



J3 rocker, large

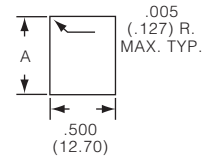


J50 rocker, snap-in

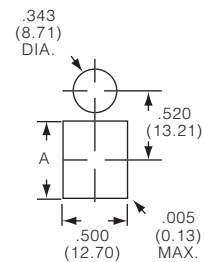
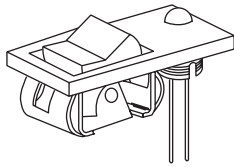


Gemini A Series Rocker/Paddle (Continued)

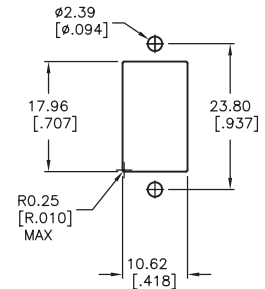
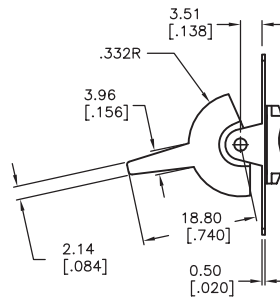
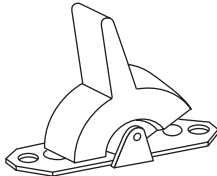
J51 rocker, snap-in w/beveled frame



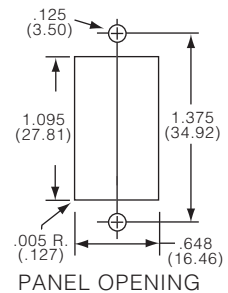
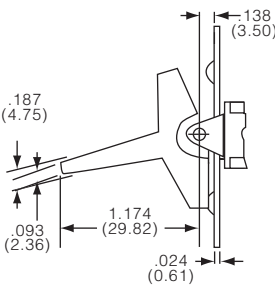
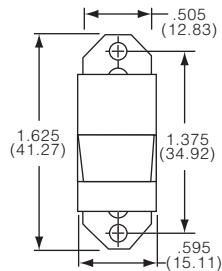
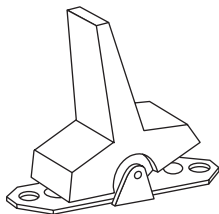
J52 rocker, snap-in, w/beveled frame and LED



J2 paddle, small

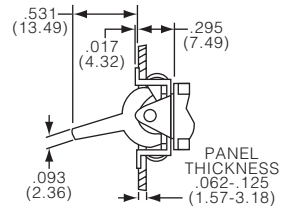
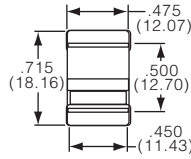
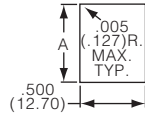


J4 paddle, large

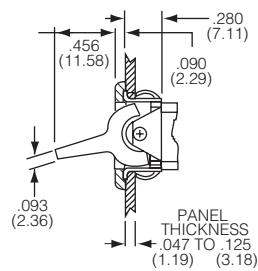
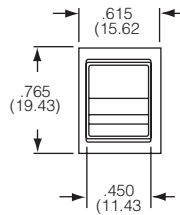
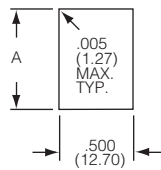
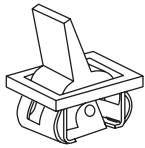


Gemini A Series Rocker/Paddle (Continued)

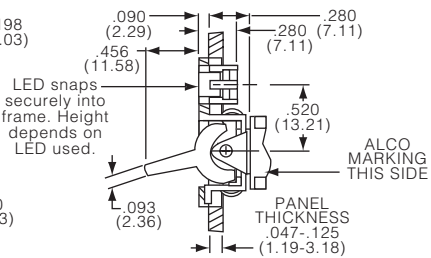
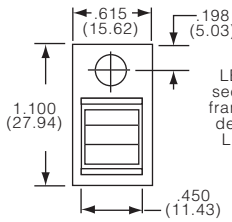
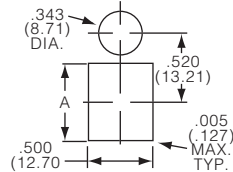
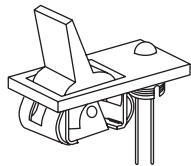
J60 paddle, snap-in



J61 paddle, snap-in w/beveled frame



J62 paddle, ssnap-in, w/beveled frame and LED



Rocker & Paddle Switches

Terminals

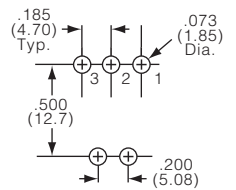
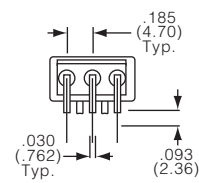
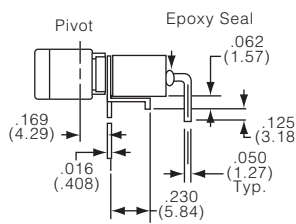
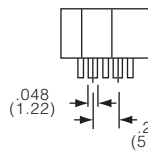


A right angle, rocker



A101J1AQ0

Single pole

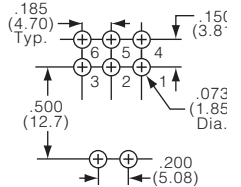
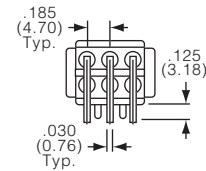
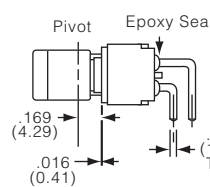
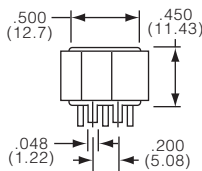


Terminal numbers viewed from top of P.C board



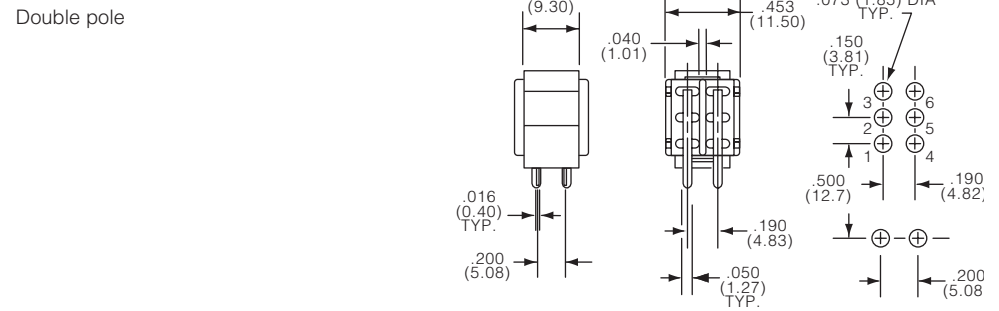
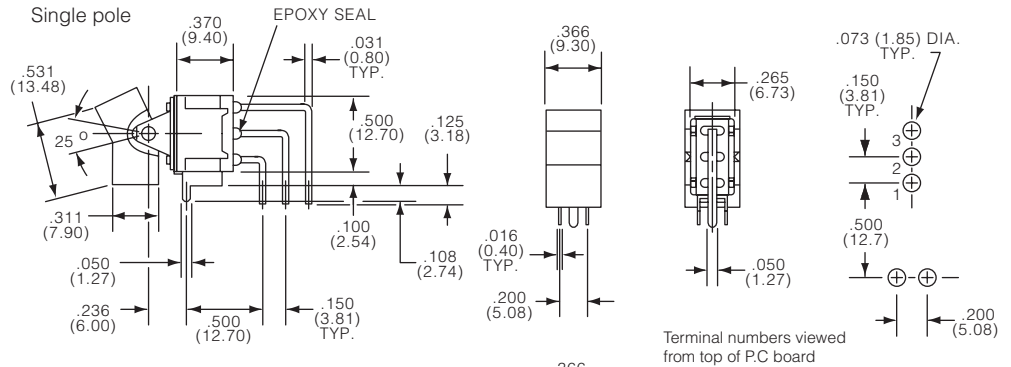
A201J1AQ0

Double pole

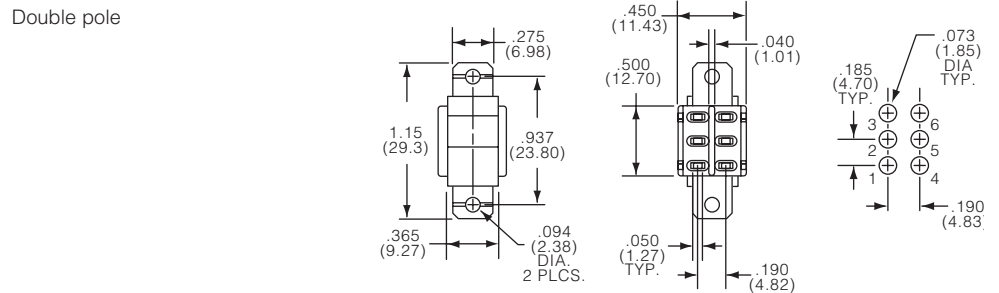
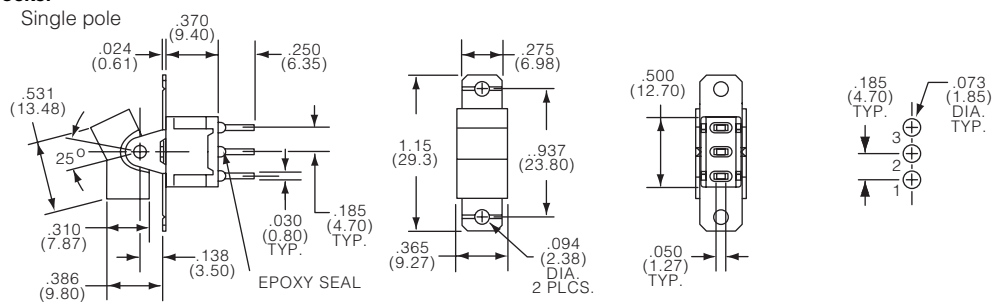


Gemini A Series Rocker/Paddle (Continued)

AV2 vertical, right angle, rocker



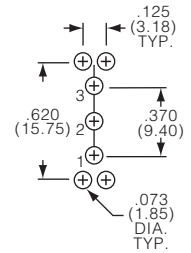
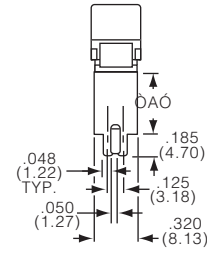
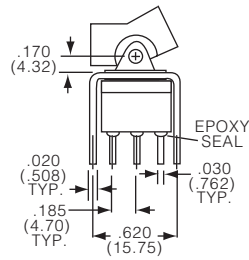
C printed circuit board, rocker



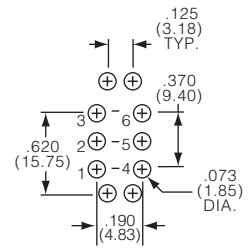
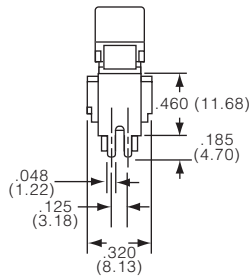
Gemini A Series Rocker/Paddle (Continued)

V3 vertical with support bracket, rocker

Single pole



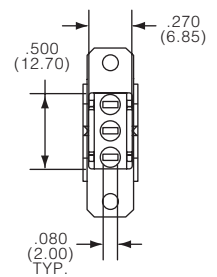
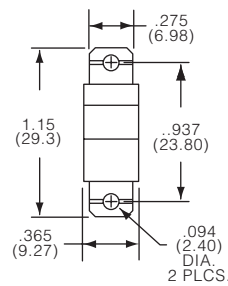
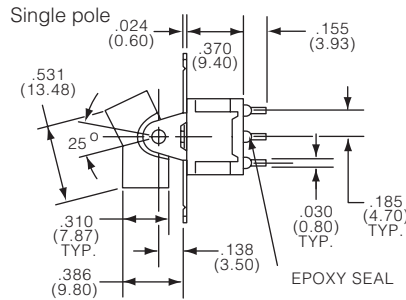
Double pole



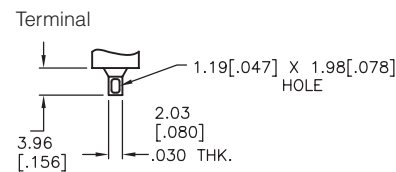
Z wire lug, rocker



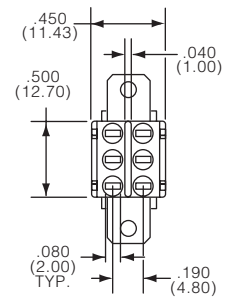
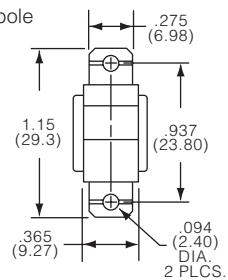
A101J1ZQ0



A201J1ZQ0

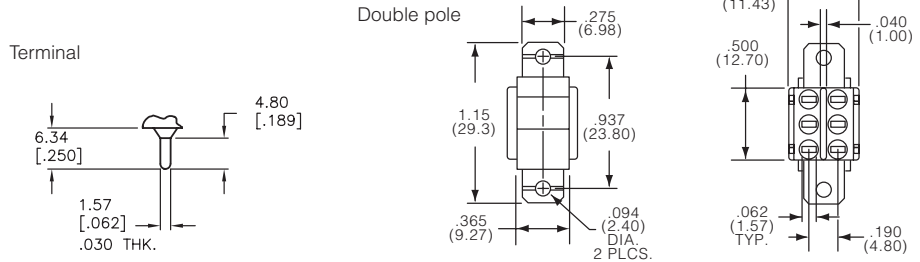


Double pole

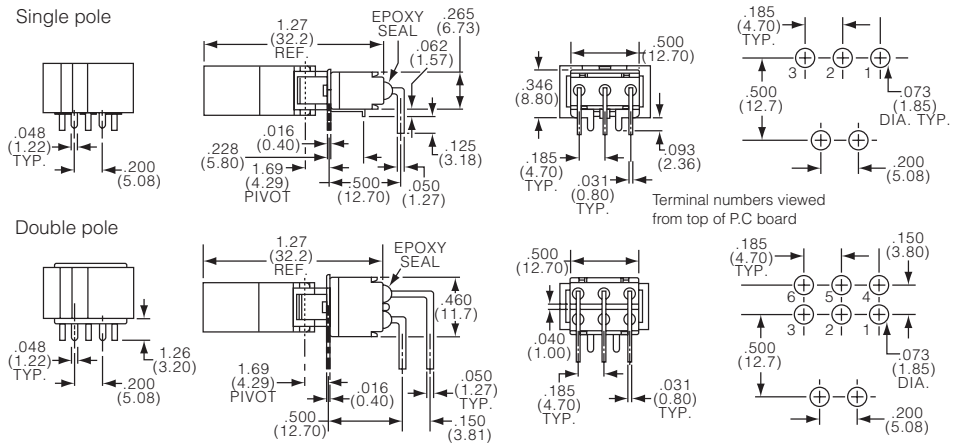


Gemini A Series Rocker/Paddle (Continued)

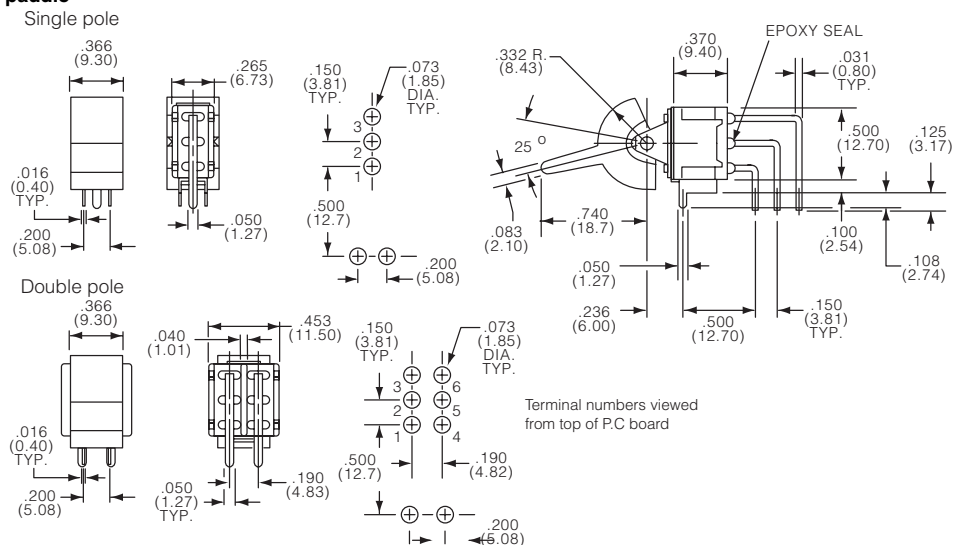
Z3 quick connect, rocker



A right angle, paddle



AV2 vertical, right angle, paddle



Rocker & Paddle Switches

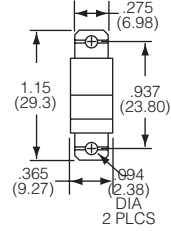
Gemini A Series Rocker/Paddle (Continued)

C printed circuit board, paddle



A105J2CQ0

Single pole



A205J2CQ0

Double pole



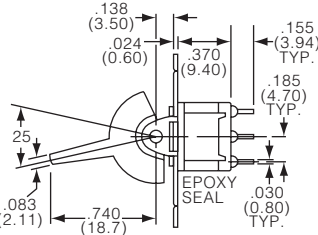
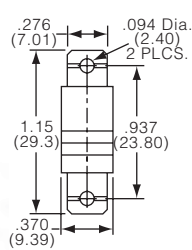
Z wire lug, paddle



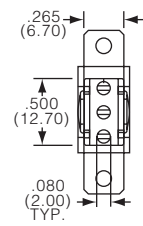
A101J2ZQ0



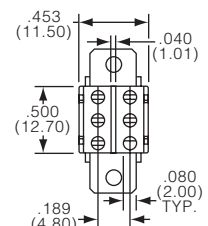
A201J2ZQ0



Single pole



Double pole



Gemini A Series Rocker/Paddle (Continued)

| Product key | Poles | Function | Actuator | Terminals | Contacts | Act. color | Fr. color | Material | Part Number |
|----------------|-------------|---------------|------------------|-----------------|----------|------------|-----------|-----------|-------------|
| A101J1AB004 | single pole | On-On | small | right angle | gold | black | n/a | RoHS | 1571986-7 |
| A101J1AQ004 | | | | | silver | | | compliant | 1571986-8 |
| A101J1AQ204 | | | | | | red | | | 1571986-9 |
| A101J1AV2B004 | | | | vertical R/A | gold | black | | | 1-1571986-0 |
| A101J1AV2Q004 | | | | | silver | | | | 1-1571986-1 |
| A101J1CG004 | | | | P.C. | Au on Ag | | | | 1-1571986-2 |
| A101J1CQ004 | | | | | silver | | | | 1-1571986-3 |
| A101J1V3B004 | | | | br. .620(15.75) | gold | | | | 1-1571986-4 |
| A101J1V3Q004 | | | | | silver | | | | 1-1571986-5 |
| A101J1ZB004 | | | | wire lug | gold | | | | 1-1571986-6 |
| A101J1ZQ004 | | | | | silver | | | | 1-1571986-7 |
| A101J2AV2Q004 | | | | vertical R/A | | | | | 1-1571986-8 |
| A101J2ZB904 | | | | wire lug | gold | white | | | 1-1571986-9 |
| A101J2ZQ004 | | | | | silver | black | | | 2-1571986-0 |
| A101J3V3Q204 | | | large | br. .620(15.75) | | red | | | 2-1571986-1 |
| A101J3ZQ004 | | | | wire lug | | black | | | 2-1571986-2 |
| A101J4ZQ004 | | | | | | | | | 2-1571986-3 |
| A101J4ZQ804 | | | | | | gray | | | 2-1571986-4 |
| A101J50AV2Q004 | | | snap-in | vertical R/A | | black | | | 2-1571986-5 |
| A101J50V3Q004 | | | | br. .620(15.75) | | | | | 2-1571986-6 |
| A101J50V3Q204 | | | | | | red | | | 2-1571986-7 |
| A101J50ZQ004 | | | | wire lug | | black | | | 2-1571986-8 |
| A101J51CB0004 | | | snap-in, frame | P.C. | gold | | black | | 2-1571986-9 |
| A101J51Z3G0004 | | | | quick c. | Au on Ag | | | | 3-1571986-0 |
| A101J51Z3Q0004 | | | | | silver | | | | 3-1571986-1 |
| A101J51ZB0004 | | | | wire lug | gold | | | | 3-1571986-3 |
| A101J51ZQ0004 | | | | | silver | | | | 3-1571986-4 |
| A101J51ZQ2004 | | | | | | red | | | 3-1571986-5 |
| A101J61ZQ0004 | | | | | | black | | | 3-1571986-6 |
| A103J1AV2B004 | | On-Off-On | small | vertical R/A | gold | | n/a | | 3-1571986-8 |
| A103J1AV2Q004 | | | | | silver | | | | 3-1571986-9 |
| A103J1V3Q004 | | | | br. .620(15.75) | | | | | 4-1571986-0 |
| A103J1ZQ004 | | | | wire lug | | | | | 4-1571986-1 |
| A103J2CB004 | | | | P.C. | gold | | | | 4-1571986-2 |
| A103J2ZQ004 | | | | wire lug | silver | | | | 4-1571986-3 |
| A103J3ZQ004 | | | large | | | | | | 4-1571986-4 |
| A103J51ZQ0004 | | | snap-in, frame | | | | black | | 4-1571986-5 |
| A103J61ZQ0004 | | | | | | | | | 4-1571986-6 |
| A105J1AQ004 | | (On)-Off-(On) | small | right angle | | | n/a | | 4-1571986-9 |
| A105J1AV2Q004 | | | | vertical R/A | | | | | 5-1571986-0 |
| A105J1CQ004 | | | | P.C. | | | | | 5-1571986-1 |
| A105J1V3B004 | | | | br. .620(15.75) | gold | | | | 5-1571986-2 |
| A105J1ZQ004 | | | | wire lug | silver | | | | 5-1571986-3 |
| A105J2AQ004 | | | | right angle | | | | | 5-1571986-4 |
| A105J2AV2Q004 | | | | vertical R/A | | | | | 5-1571986-5 |
| A105J2ZQ004 | | | | wire lug | | | | | 5-1571986-6 |
| A105J3CQ004 | | | large | P.C. | | | | | 5-1571986-7 |
| A105J3CQ2004 | | | | | | red | black | | 5-1571986-8 |
| A105J3ZQ004 | | | | wire lug | | black | n/a | | 5-1571986-9 |
| A105J4ZQ004 | | | | | | | | | 6-1571986-0 |
| A105J51ZQ0004 | | | snap-in, frame | | | | black | | 6-1571986-1 |
| A105J52ZQ2004 | | | snap-in, f., LED | | | red | | | 6-1571986-2 |
| A105J61ZG0004 | | | snap-in, frame | | Au on Ag | black | | | 6-1571986-3 |
| A105J61ZQ0004 | | | | | silver | | | | 6-1571986-4 |
| A107J51ZQ0004 | | On-Off-(On) | | | | | | | 6-1571986-5 |
| A107J61ZQ0004 | | | | | | | | | 6-1571986-6 |
| A108J1V3Q004 | | On-(On) | small | br. .620(15.75) | | | n/a | | 6-1571986-7 |
| A108J1ZQ004 | | | | wire lug | | | | | 6-1571986-8 |
| A108J51ZQ0004 | | | snap-in, frame | | | | black | | 6-1571986-9 |
| A108J61ZQ0004 | | | | | | | | | 7-1571986-0 |

Gemini A Series Rocker/Paddle (Continued)

| Product key | Poles | Function | Actuator | Terminals | Contacts | Act. color | Fr. color | Material | Part Number |
|----------------|--------|---------------|----------------|-----------------|----------|------------|-----------|-----------|-------------|
| A201J1AQ004 | double | On-On | small | right angle | | black | n/a | RoHS | 1571987-2 |
| A201J1AQ204 | pole | | | | | red | | compliant | 1571987-3 |
| A201J1AV2Q004 | | | | vertical R/A | | black | | | 1571987-4 |
| A201J1CQ004 | | | | P.C. | | | | | 1571987-5 |
| A201J1V3Q004 | | | | br. .620(15.75) | | | | | 1571987-6 |
| A201J1ZQ004 | | | | wire lug | | | | | 1571987-7 |
| A201J2CQ004 | | | | P.C. | | | | | 1571987-8 |
| A201J2ZQ004 | | | | wire lug | | | | | 1571987-9 |
| A201J3ZB004 | | | large | | gold | | | | 1-1571987-0 |
| A201J3ZQ004 | | | | | silver | | | | 1-1571987-1 |
| A201J50AV2Q004 | | | snap-in | vertical R/A | | | | | 1-1571987-2 |
| A201J50AV2Q804 | | | | | | gray | | | 1-1571987-3 |
| A201J50ZQ004 | | | | wire lug | | black | | | 1-1571987-4 |
| A201J51ZQ0004 | | | snap-in, frame | | | | black | | 1-1571987-5 |
| A201J51ZQ9904 | | | | | | white | white | | 1-1571987-7 |
| A201J61Z3Q0004 | | | | quick c. | | black | black | | 1-1571987-8 |
| A201J61ZQ0004 | | | | wire lug | | | | | 1-1571987-9 |
| A203J1AQ004 | | On-Off-On | small | right angle | | | n/a | | 2-1571987-0 |
| A203J1AV2Q004 | | | | vertical R/A | | | | | 2-1571987-1 |
| A203J1CQ204 | | | | P.C. | | red | | | 2-1571987-2 |
| A203J1ZQ004 | | | | wire lug | | black | | | 2-1571987-4 |
| A203J51ZQ0004 | | | snap-in, frame | | | | black | | 2-1571987-6 |
| A203J61ZQ0004 | | | | | | | | | 2-1571987-7 |
| A205J1AV2Q004 | | (On)-Off-(On) | small | vertical R/A | | | n/a | | 2-1571987-9 |
| A205J1ZQ004 | | | | wire lug | | | | | 3-1571987-0 |
| A205J2CQ004 | | | | P.C. | | | | | 3-1571987-1 |
| A205J2ZQ004 | | | | wire lug | | | | | 3-1571987-2 |
| A205J51ZQ0004 | | | snap-in, frame | | | | black | | 3-1571987-3 |
| A205J61ZQ0004 | | | | | | | | | 3-1571987-4 |
| A207J1ZQ004 | | On-Off-(On) | small | | | | n/a | | 3-1571987-5 |
| A207J3ZQ004 | | | large | | | | | | 3-1571987-6 |
| A207J51ZQ0004 | | | snap-in, frame | | | | black | | 3-1571987-7 |
| A207J61ZQ0004 | | | | | | | | | 3-1571987-8 |
| A208J1V3Q004 | | On-(On) | small | br. .620(15.75) | | | n/a | | 4-1571987-0 |
| A208J51ZQ0004 | | | snap-in, frame | wire lug | | | black | | 4-1571987-1 |
| A208J61ZQ0004 | | | | | | | | | 4-1571987-2 |
| A211J51ZQ0004 | | On-On-On | | | | | | | 4-1571987-3 |
| A213J61ZQ0004 | | On-On-(On) | | | | | | | 4-1571987-4 |

Rocker & Paddle Switches

Gemini AE Series Rocker/Paddle

Features

- Multiple actuator colors available
- G and Q contacts UL® recognition
- Sealed to IP67 select series



Typical performance characteristics

Contact configuration SPST, DPST
 Contact timing break-before-make
 Contact rating max. B contacts: 0.4 VA @ 20 V max. AC or DC
 G contacts: 0.4 VA @ 20 V max. AC or DC or
 5 A @ 120 VAC or 28 VDC (resistive) or
 2 A @ 250 VAC (resistive)
 Q contacts: 5 A @ 120 VAC or 28 VDC (resistive) or
 2 A @ 250 VAC (resistive)
 Electrical life. 6,000 cycles at rated load
 Mechanical life. 40,000 cycles
 Contact resistance. max. 10 mOhms initial @ 2-4 VDC, 100 mA
 Insulation resistance min. 1,000 MOhms
 Dielectric strength. 1,000 Vrms at sea level
 Standards and specs. UL® recognition on G & Q contacts

Environmental specification

Operating temperature -30°C to 85°C
 Storage temperature -40°C to 85°C
 Solder heat resistance wave solder capable to 265°C

Material specifications

Contacts & terminals. B contacts: copper alloy w/ gold over nickel
 G contacts: copper alloy w/ silver
 Q contacts: copper alloy w/ gold over silver
 Actuator phenolic
 Case. nylon red, UL94 V-0
 Support bracket brass/ tin plated
 Seal. epoxy UL94 V-1
 O ring. pvc, black
 Spring music wire
 Mounting bracket & rocker cap. nylon UL94 V-1
 Retainer stainless steel
 RoHS Directive 2002/95/EC compliant

| Product key | | Typical product key | | | | | | | |
|------------------------|---|--------------------------------|-----------------------------------|------------------|-----------|----------|----------|----------|-----------|
| | | AE | 1 | 01 | J1 | A | Q | 0 | 04 |
| Type | Rocker/Paddle Switch | | | | | | | | |
| Number of poles | 1 single pole | 2 double pole | | | | | | | |
| Function | 01 On-On | 07 On-Off-(On) | | | | | | | |
| | 05 (On)-Off-(On) | 08 On-(On) | | | | | | | |
| Actuator | Rocker | | Paddle | | | | | | |
| | J1 standard | J50 small | J2 standard | J60 small | | | | | |
| Terminals | A right angle | W wire wrap .736 (18.7) | W4 wire wrap 1.062 (27.00) | | | | | | |
| | AV2 vertical R/A | Z wire lug | Z3 quick connect | | | | | | |
| | C P.C. | | | | | | | | |
| | V3, V4 vertical with support bracket | | | | | | | | |
| Contacts | B gold | G gold over silver | Q silver | | | | | | |
| Actuator color | 0 black (std.) | 2 red | | | | | | | |
| Material | 04 RoHS compliant | | | | | | | | |

Gemini AE Series Rocker/Paddle (Continued)

Function



Codes 01, 05, 07 and 08

| Code | Positions | | | |
|------|---------------------|----------------|------|----------------|
| 01 | 2 positions | On | None | On |
| 08 | 2 positions | On | None | (On) |
| | Term. conn. | 1 - 2 | --- | 2 - 3 |
| 05 | 3 positions | (On) | Off | (On) |
| 07 | 3 positions | On | Off | (On) |
| | Terminals connected | 1 - 2 4 - 5 | --- | 2 - 3 5 - 6 |

Off mechanical position, no electrical connection
 (On) momentary mechanical position and electrical connection
 None no mechanical position

Actuator



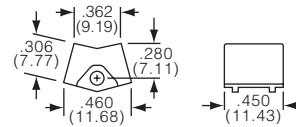
J1, J50 rockers standard and small rocker

J1 standard rocker



mounting provided with C or Z terminal types

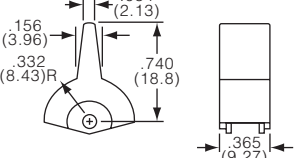
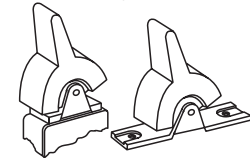
J50 small rocker



mounting provided with C or Z terminal types

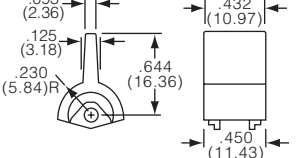
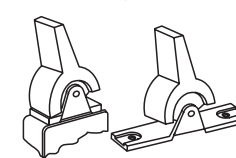
J2, J60 paddles standard and small paddle

J2 standard paddle



mounting provided with C or Z terminal types

J60 small paddle



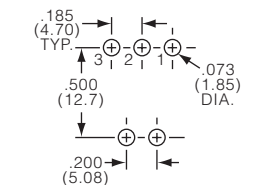
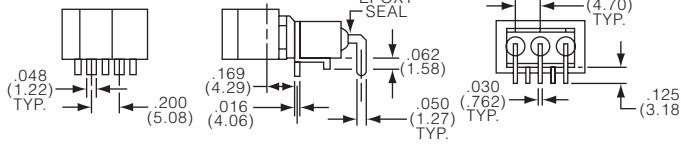
mounting provided with C or Z terminal types

Terminals

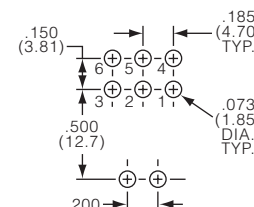
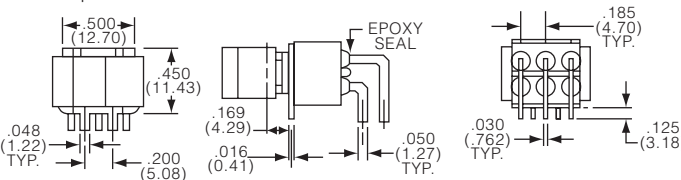


A right angle

Single pole

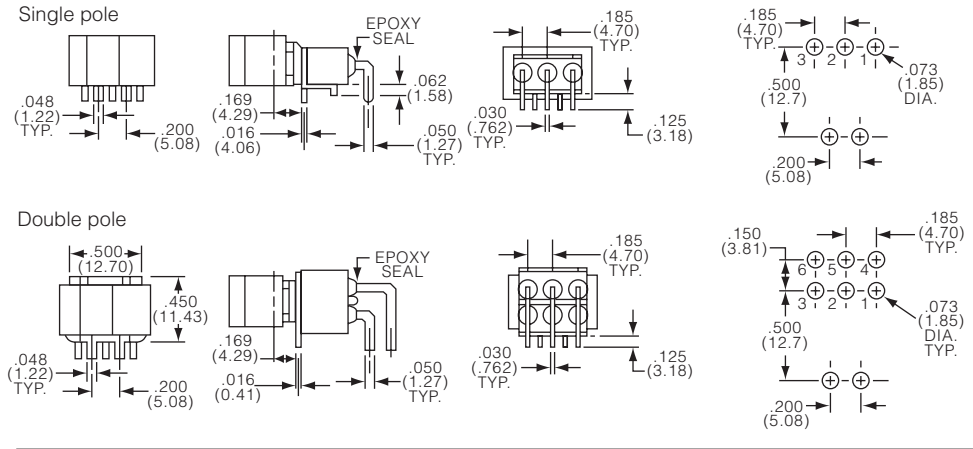


Double pole

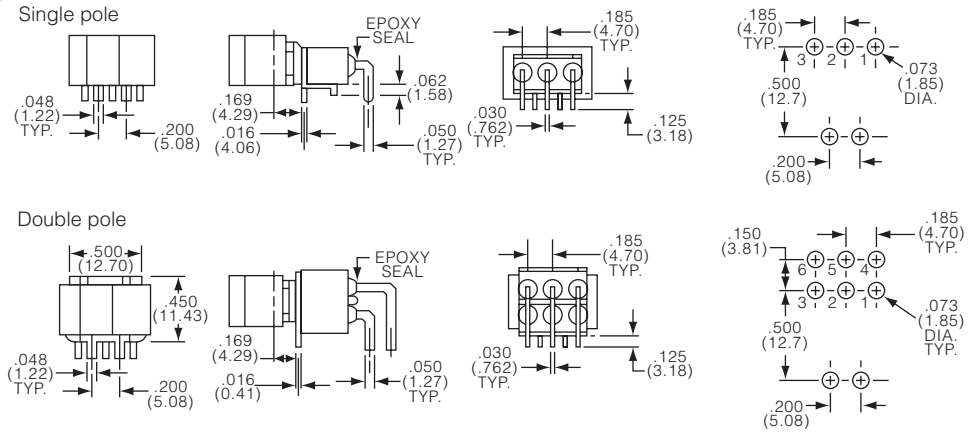


Gemini AE Series Rocker/Paddle (Continued)

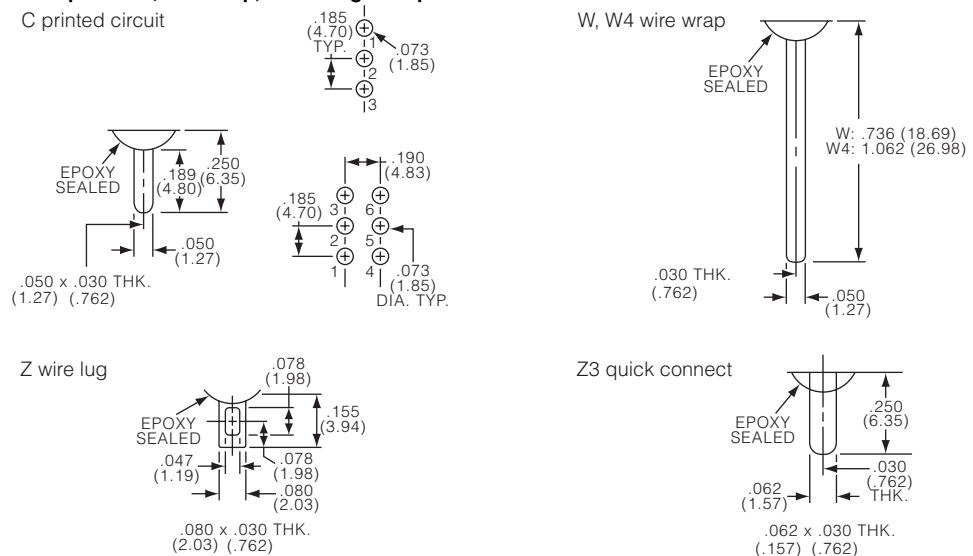
AV2 vertical right angle



V3, V4 vertical with support bracket



Codes C, W, W4, Z and Z3 rpc board, wire wrap, solder lug and quick connect



Gemini AE Series Rocker/Paddle (Continued)

| Product key | Poles | Function | Actuator | Terminals | Contacts | Act. color | Material | Part Number |
|----------------|-------------|---------------|----------|-----------------|----------|------------|----------------|-------------|
| AE101J1AB004 | single pole | On-On | standard | right angle | gold | black | RoHS compliant | 1571988-1 |
| AE101J1AQ004 | | | | | silver | | | 1571988-2 |
| AE101J1A2Q004 | | | | | | yellow | | 1571988-3 |
| AE101J1AV2Q004 | | | | vertical R/A | | black | | 1571988-4 |
| AE101J1V3B004 | | | | br. .620(15.75) | gold | | | 1571988-5 |
| AE101J1V3Q004 | | | | | silver | | | 1571988-6 |
| AE103J50V3B004 | | On-Off-On | small | | gold | | | 1571988-7 |
| AE103J60V3Q204 | | | | | silver | red | | 1571988-8 |
| AE105J1AQ004 | | (On)-Off-(On) | standard | right angle | | black | | 1571988-9 |
| AE105J1V3B004 | | | | br. .620(15.75) | gold | | | 1-1571988-0 |
| AE105J1ZB004 | | | | wire lug | | | | 1-1571988-1 |
| AE105J60V3B004 | | | small | br. .620(15.75) | | | | 1-1571988-2 |
| AE107J1AQ004 | | On-Off-(On) | standard | right angle | silver | | | 1-1571988-3 |
| AE107J1ZQ004 | | | | wire lug | | | | 1-1571988-4 |
| AE108J1ZQ004 | | On-(On) | | | | | | 1-1571988-5 |
| AE108J60V3B004 | | | small | br. .620(15.75) | gold | | | 1-1571988-6 |
| AE201J1AQ004 | double pole | On-On | standard | right angle | silver | | | 1571989-1 |
| AE201J1AV2Q004 | | | | vertical R/A | | | 1571989-2 | |
| AE201J1V3B004 | | | | br. .620(15.75) | gold | | | 1571989-3 |
| AE201J2AQ204 | | | | right angle | silver | red | | 1571989-4 |
| AE203J1AQ004 | | On-Off-On | | | | black | | 1571989-5 |
| AE205J50V3B004 | | (On)-Off-(On) | small | br. .620(15.75) | gold | | | 1571989-6 |
| AE205J60V3B004 | | | | | | | | 1571989-7 |
| AE208J50V3B004 | | On-(On) | | | | | | 1571989-8 |

Rocker & Paddle Switches

Mouser Electronics

Authorized Distributor

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[TRD11D10WL](#) [TRD11D10QCL2](#) [TRD13D10QC](#) [TRD13D10WLLR25](#) [TRD13H10WLLR2](#) [A203J61ZQ00](#)
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[TRD21N10WL](#) [TRD21P10WL](#) [TRD23P20WL](#) [TRD23P10WL](#) [TRD23P12WL](#) [TRD13D10WLUL](#) [A105J1ZQ004](#)
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[AE101J1AQ004](#) [AE201J1V3B004](#) [TRD21R10WL](#) [A201J1AV2Q004](#) [A207J51ZQ0004](#)