E Littelfuse Cak



Agency Approvals

| Agency | Agency File Number |
|------------------|--------------------|
| c RN ° us | E42363 |

Specifications

| Contact Rating | 9201 model: GP (general purpose) 6 amps 125 VAC 50/60 Hz T85 10,000 cycles (10E3) 3 amps 250 VAC 50/60 Hz T85 10,000 cycles R (resistive) 6 amps 30 VDC T85 10,000 cycles 9221 Model: GP (general purpose) 10 amps 125 VAC 50/60 Hz T85 10,000 cycles 5 amps 250 VAC 50/60 Hz T85 10,000 cycles R (resistive) 10 amps 30 VDC T85 10,000 cycles | | |
|-----------------------|---|--|--|
| Electrical Life | 25,000 make-and-break cycles at full load. | | |
| Contact Resistance | Below 10 m Ω typ. initial @ 2-4 V DC, 100 mA. | | |
| Insulation Resistance | 10º Ω min. | | |
| Dielectric Strength | 2,500 Vrms min. @ sea level. | | |
| Operating Temperature | -30°C to 85°C | | |
| Solderability | Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging). | | |

Description

Those designing products that require a shut-off switch need to ensure that the switch they incorporate is durable, resistant to the elements and can withstand repeated use. the 9000 series of power rocker and lever handle switches feature thermoset UL 94V-0 housing, rugged construction and a variety of actuator and termination options, making them perfect for all types of small appliances and shut-off switches.

Features & Benefits

- Thermoset UL 94V-0 housing
- Rugged construction
- Variety of actuator and termination options
- RoHS compliant
- Applications
- Small equipment
- Shut-off switch

Materials

| Case | Diallyl phthalate (DAP) (UL 94 V-0). | | |
|--|--|--|--|
| Actuator | Nylon, black standard. | | |
| Frame-Rear Mount Options | Spring steel, black. | | |
| Bushing | Brass, nickel plated. | | |
| Housing | Stainless steel. | | |
| Switch Support Brass or steel, matte-tin plated. | | | |
| Mounting Bracket | Stainless steel. | | |
| End Contacts | 9201 Model: Coin silver, silver plated. 9221 Model: Silver cadmium oxide. | | |
| Center Contacts | Copper alloy, silver plated. | | |
| All Terminals | 9201 Model: Copper alloy, silver plated. 9221 Model: Copper alloy, matte-tin plated. | | |
| Terminal Seal | Epoxy. | | |
| Hardware | Nut, Screw & Lockwasher: Stainless steel. Standoff: Nylon standard, aluminum available, consult Customer Service Center. | | |

Notes:

Cadmium used in electrical contacts is acceptable for RoHS.

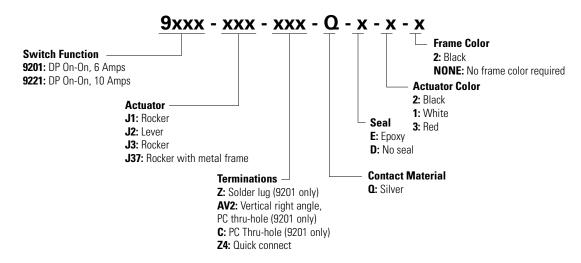
Any models supplied with Ω contact material are RoHS compliant.

Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.



Ordering Number

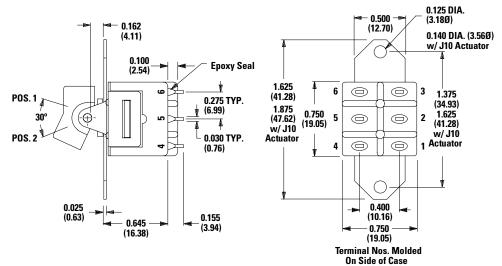
To order, simply select desired option from each category and place in the appropriate box. For additional options not shown in catalog, consult Customer Service Center.



Switch Function DPDT

| | | | Switch Function | | Connected Terminals | | |
|-----------|-----------|---------------------|-----------------|---------------|----------------------------|---------|-----------|
| | | | | C&K marking o | on opposite side | | |
| No. Poles | Model No. | Rating ¹ | POS. 1 | POS. 3 | POS. 1 | POS. 3 | Schematic |
| | | | | | | | |
| DP | 9201 | 6 Amps | ON | ON | 2-3,5-6 | 2-1,5-4 | |
| DP | 9221 | 10 Amps | ON | ON | 2-3,5-6 | 2-1,5-4 | |

Dimensions inches (mm)



Part number shown: 9201J1ZQE2

Notes: All 9000 Series models meet international dimensional and electrical requirements. CNUs 1. See Contact Material , page 6, for complete ratings. 9221 model must be ordered with Z4 terminations and D seal option.

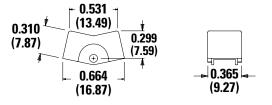




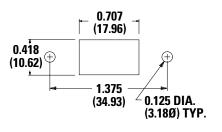
Actuator-Panel Mount inches (mm)

J1 Rocker





Panel Mounting



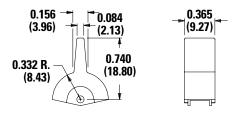
Option CodeActuator Color2Black1White3Red

Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

Notes: Hardware: two each—mounting screws, nuts, lockwashers and standoffs for 1/8 inch thick panel are supplied standard on all switches with panel mounting brackets. Actuators available separately, see page 7. Hardware available separately, see Technical Data section of this catalog.

J2 Lever

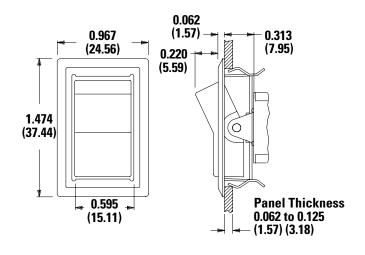




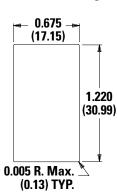


E Littelfuse Cak

J3 Rocker



Panel Mounting



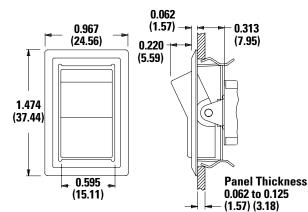


| Option Code | Actuator Color |
|-------------|----------------|
| 2 | Black |
| 1 | White |
| 3 | Red |

Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

Notes: Actuators available separately, see page 7. Hardware: two each—mounting screws, nuts, lockwashers and standoffs for 1/8 inch thick panel are supplied standard on all switches with panel mounting brackets. Hardware available separately, see Technical Data section of this catalog.

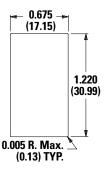
Actuator-Rear Mount inches (mm) J37 Rocker with Frame



Not available with AV2 termination

| Option Code | Actuator Color |
|-------------|----------------|
| 2 | Black |
| 1 | White |
| 3 | Red |

Panel Mounting





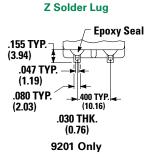
| Option Code | Frame Color | | |
|-------------|-------------|--|--|
| 2 | Black | | |

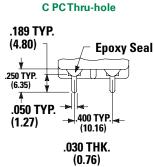
Finish: Matte. Frame finish: Gloss. Other colors, custom actuator markings and legends available, consult Customer Service Center.

Notes: Actuators & frames available separately, see page 7. Hardware: two each—mounting screws, nuts, lockwashers and standoffs for 1/8 inch thick panel are supplied standard on all switches with panel mounting brackets. Hardware available separately, see Technical Data section of this catalog.

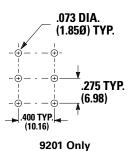




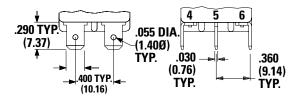




PC Mounting



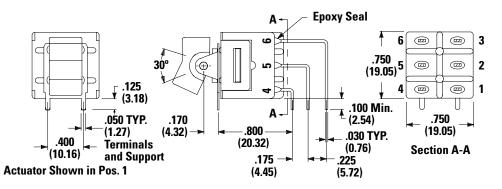
Z4 Quick Connect



9201 and 9221

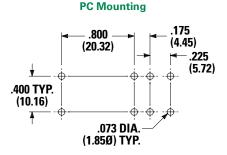
Notes: Only termination available with 9221 model. Must be ordered with D seal option. Mating terminal standard Nema 0.187" quick connect.

AV2 Vertical Right Angle, PC Thru-hole 9201J1AV2QE2 Vertical Actuation DPDT



9201 Only

Notes: Terminal bend radii and lead-in manufacturing option. Terminal spacing greater than 3mm at all points.





ELittelfuse **C**&K Switches

9000 Series Power Rocker & Lever Handle Switches

Contact Material

| Option Code | Model | Contact Material | Terminal Plating | Ratings |
|-------------|-------|--|------------------------------|---|
| Q | 9201 | Silver ^{1,2} | Silver or Tin ^{2,5} | GP (general purpose) 6 amps 125 VAC 50/60 Hz T85 10,000 cycles (10E3) 3 amps 250 VAC 50/60 Hz T85 10,000 cycles R (resistive) 6 amps 30 VDC T85 10,000 cycles |
| | 9221 | Silver Cadmium Oxide ^{3,4,6} | Tin⁵ | GP (general purpose) 10 amps 125 VAC 50/60 Hz T85 10,000 cycles (10E3) 5 amps 250 VAC 50/60 Hz T85 10,000 cycles R (resistive) 10 amps 30 VDC T85 10,000 cycles |

Notes: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications. 1. End Contacts: Coin silver, silver plated.

2. Center Contacts & All Terminals: Copper alloy, silver plated.

3. End Contacts: Silver cadmium oxide.

4. Center Contacts: Copper alloy, silver plated. 5. Z4 Terminals Only: Copper alloy, tin plated.

6. Cadmium used for electrical contacts is acceptable for RoHS.

Any models supplied with Q contact material is RoHS compliant. 9221 model must be ordered with Z4 terminations and D seal option.

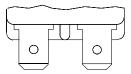
All 9000 Series models meet international dimensional and electrical requirements.

Seal inches (mm)

E Epoxy Seal

Epoxy Seal .075 Max. (1.91)

D No Epoxy Seal



Must be ordered with 9221 model and Z4 termination.

Not available with 9221 model or Z4 terminations.



C&K[®] Switch Datasheet



Available Hardware

Panel mounting hardware for rocker and lever handle switches is available separately. Mounting hardware consists of two screws, two nuts, two standoffs and two lockwashers per switch, and is available for panel thicknesses of 1/16, 3/32 and 1/8 inch. See part numbers below.

J1 & J2 actuators

J1 Actuator

Part No.

776A01000 White

776A02263 Black

776A03000 Red

Material: Nylon

Finish: Matte

J3 & J37 Actuators

Part No. 766601000 White

766602263 Black

766603000 Red

Material: Nylon Finish: Matte Standoff Length

0.295 (7.49)

0.264 (6.71)

0.233 (5.92)

Panel Thk.

1/16 IN. (1.59)

3/32 IN. (2.38)

1/8 IN. (3.18)

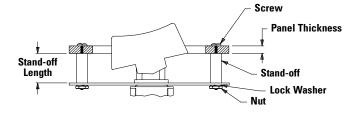
Part No.

761101000

761102000

761103000

Typical Assembly



J2 Actuator



Part No. 760501000 White 760502263 Black 760503000 Red Material: Nylon Finish: Matte

Frame for J37 Actuator



Part No. 445400746 Black Enamel Material: Spring Steel

Notes: Additional nuts, screws and lockwashers available separately, see Technical Data section of this catalog. Other colors available, consult Customer Service Center.

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