

Features

- UL / CUL / CAS / RoHS / REACH compliance
- SPDT contact configuration
- Power level and low circuit with multi-pole and multi-position, a variety of actuator, bushing and termination options

RS PRO Toggle Switches

RS Stock No.: 0186253



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Product Description

2A 250VAC/5A 125VAC Power Level, from SPST to 4PDT with a variety of options for actuator, bushing and terminal. Optional locking lever or safety cover to prevent from accidental actuation.

Suitable applications:

- *Instrumentation*
- *Shut-off switch*
- *Medical equipment*
- *Telecommunication and Networking*

Package Contain

1 x Miniature Toggle Switch
2 x Nuts
1 x Locking Ring
1 x Lock Washer

General Specifications

Contact Configuration	SPDT
Switch Operation	ON-ON
Mounting Type	Panel Mount
Terminal Type	Solder Lug
Illuminated	No
Panel Cut Out Height	5mm
Panel Cut Out Diameter	6.35mm
Actuator Length	12.3mm

Electrical Specifications

Contact Current Rating	5Amps @ 125VAC or 28VDC 2Amps @ 250VAC
Voltage Rating	2A 250VAC/5A 125VAC
Electrical Life	50,000 make-and-break cycles at full load
Contact Resistance	10m-ohms max. initial @ 2-4VDC, 100mA for both silver and gold plated contacts
Insulation Resistance	Apply 500VDC for 1min±5sec. b/w live parts and dead-metal parts. The measurement shall be 1000M-ohms min.
Dialectical Strength	1,500V (50Hz-60Hz) RMS @ sea level shall result no damage to parts arcing or flashover
Operating Temperature	-30Celsius degree to +85Celsius degree

Reliability Performance

Soldering Ability	Per MIL-STD-202F method 208D,max soldering temperature @ 260Celsius degree, flux 5-10sec, duration of solder immersion 5+/-1sec. shall result no anti-soldering and the coverage of dipping into solder must be more than 90%
Soldering Heat Resistance	Max soldering temperature @ 260Celsius degree, immersion time 5+/-1sec, frequency of soldering process @ 2 times max.
Cold Test	Stored at temperature -30(+/-3)Celsius degree for 48 hours, then left at room temperature for an hr before electrical performance is measured.
Hot Test	Stored at temperature 85(+/-3)Celsius degree for 48 hours, then left at room temperature for an hr before electrical performance is measured.
Humidity Test	Stored at temperature 85(+/-3)Celsius degree with relative humidity 90%~95% for 48 hours, then left at room temperature for an hr before electrical performance is measured.
Salt Spray Resistance	Stored at temperature @ 35(+/-3)Celsius degree, and salt solution concentration of 5% with full air temperature @ 47(+/-3) Celsius degree and air pressure 1.0kg for 48 hours. The switch shall result no corrosion as well as no apparent changes to its functional performance. Per ASTM-B117 & JIS-Z371 STD.

Material Characteristics

Case	Diallyl phthalate (DAP)(UL 94V-0)
Toggle Handle	Brass, chrome plated Zinc alloy, nickel plated (locking lever types only)
Bushing	Brass, nickel plated
Housing	Stainless steel
Movable Contact	Copper alloy, silver plated
Terminal Contact	Copper alloy, silver plated
All Terminals	Copper alloy, silver plated
Terminal Seal	Epoxy sealed (std. type)
Hardware	Nut(brass), locking ring/lock washer(stainless steel)

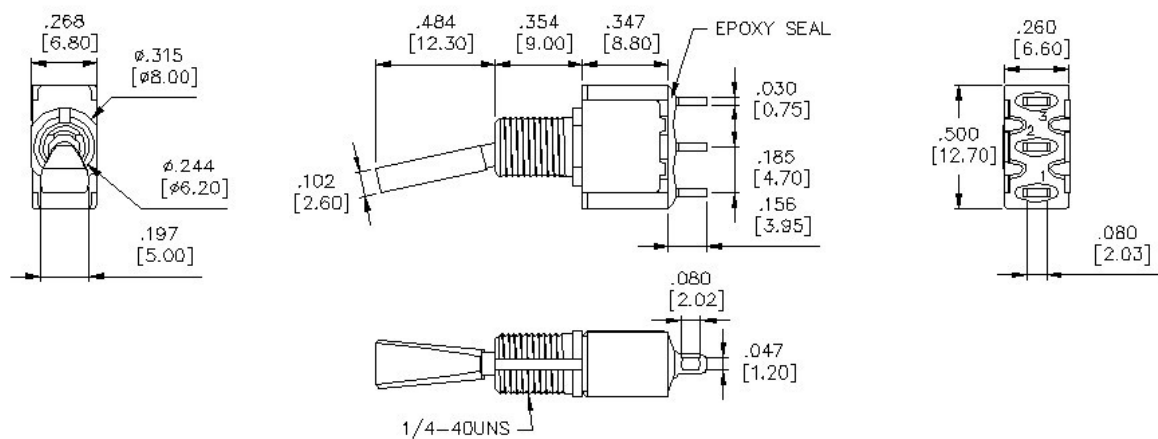
Soldering & Cleaning Recommendation

Hand Soldering	Max. temperature @ 350Celsius degree (662F)with continuous soldering time @ 3sec. max. Recommend soldering irons of 25-40 watts max. and solder of 0.030~0.040 dia.
Wave (Dip) Soldering	No-clean flux wave soldering is recommended so the switch does not require washing after soldering process. Noted, not to have flux migrate inside the switch through the top of the housing or actuator to prevent contamination. Max temperature @ 260Celsius degree (500F) for 10sec.
Cleaning Process	Noted, the switch is “not totally sealed” so it is important not to immerse/spray or clean unsealed areas of the switch during flux removal. To clean after soldering, keep the switch in an up-right position and tape-sealed the non-washable area such as cover and actuator to prevent the cleaning solution from entering into the body of the switch. Improper cleaning could cause switch deficiencies such as intermittence or open contact failures

Approvals

Compliance/Certifications	UL / CUL 1054, CSA
Declarations	RoHS, REACH, CMRT, Section 54 of the Modern Slavery Act

Drawing:



Schematic:

2Comm.

