

RoHS
Compliant



Features:

- Material : actuators and frames are nylon. Terminals are silver plated brass.

Specifications:

Rating	: 3A 125V, 1.5A 250V AC; 10A 250V AC 1/2HP.
Max. contact Resistance	: 50mΩ.
Min. insulation Resistance	: 500V dc 100MΩ.
Dielectric strength	: 1,000V AC 1 minute.

Scope

These requirements cover manually and mechanically operable special-use switches:

That is for use on direct current as well as on alternating current only.

For which the load ratings do not exceed 60 amperes at 250 volts or a lower potential and 30 amperes or 2 horsepower at 600 volts or a lower potential.

Electrical Ratings

Item	Requirements
Rated voltage and current	(base on switch type)
Contact resistance (new state)	<100mΩ (5V, 1A DC)
Dielectric strength (new state)	>1,000V >2,500V (10mA between the contacts)
Insulation resistance (new state)	>100MΩ (500V DC between the open contacts)
Inrush current	50A/3msec (capacitive load)
Electrical life endurance	>6,000 operations Volt drop : <100mV >10,000 operations
Temperature rise at the terminals (according to electrical life endurance)	<30°C - 6000 operations <45°C - 10,000 operations (ambient conditions : 25 ±2°C and 65 ±5%R.H)

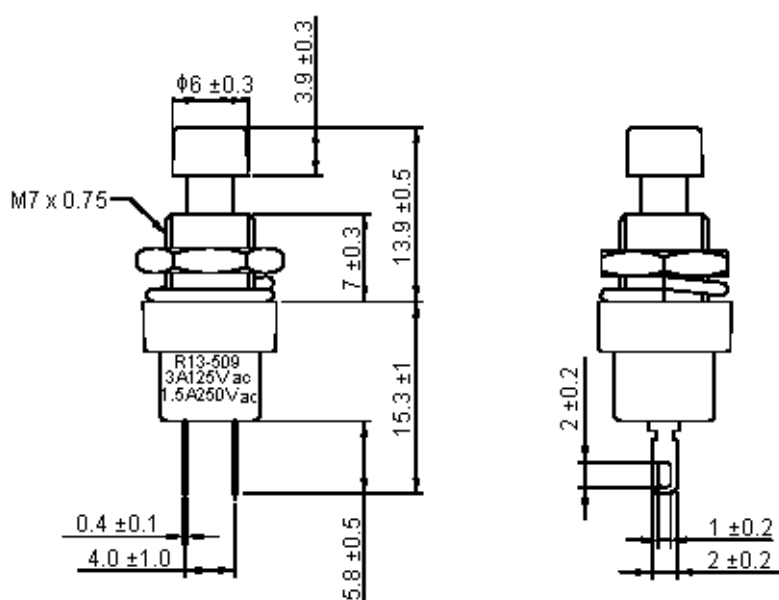
Mechanical Characteristics

Item	Requirements
Actuating force	(base on switch type)
Operating life endurance	>100,000 operations
Terminal strength	>2.5kg - solder terminal >6.8kg - plug-in/screw terminal
Solderability of terminals	Max. 350°C/3sec (no pressure may be exerted on the terminals when soldering by hand)

Environmental

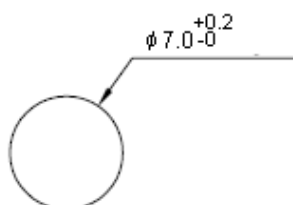
Item	Requirements
Ambient temperature	20°C to +65°C
Humidity	Maximum 85%
Salt spray test	No remarkable rust in metal parts (5% salt/35°C 24hrs)
Shock test	No mechanical defect or damage (100g/10msec X, Y, Z 3 times)
Vibration test	No mechanical defect damage (10-55Hz/1.5mm/X, Y, Z 2hrs)

R13-509A-05-BB and R13-509A-05-BR



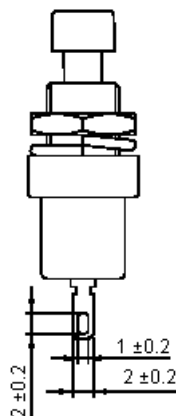
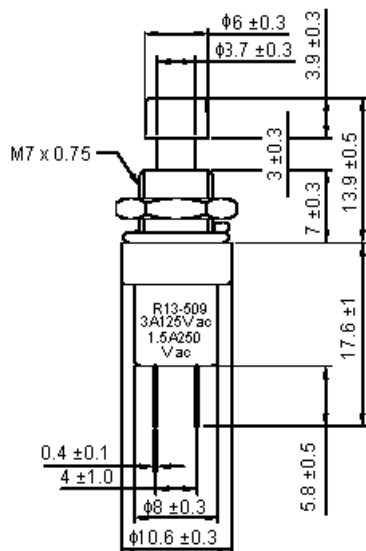
Mounting Hole

Circuit Diagram

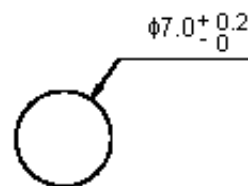


Dimensions : Millimetres

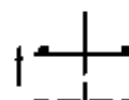
R13-509B-05-BB



Mounting Hole

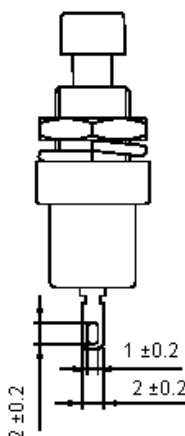
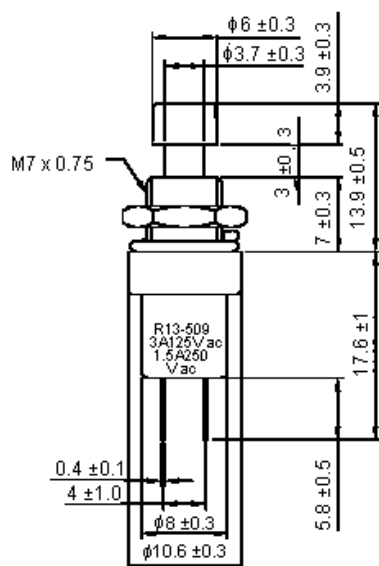


Circuit Diagram

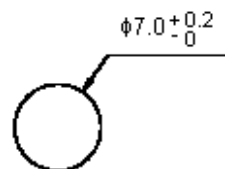


Dimensions : Millimetres

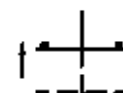
R13-509B-05-BR



Mounting Hole



Circuit Diagram

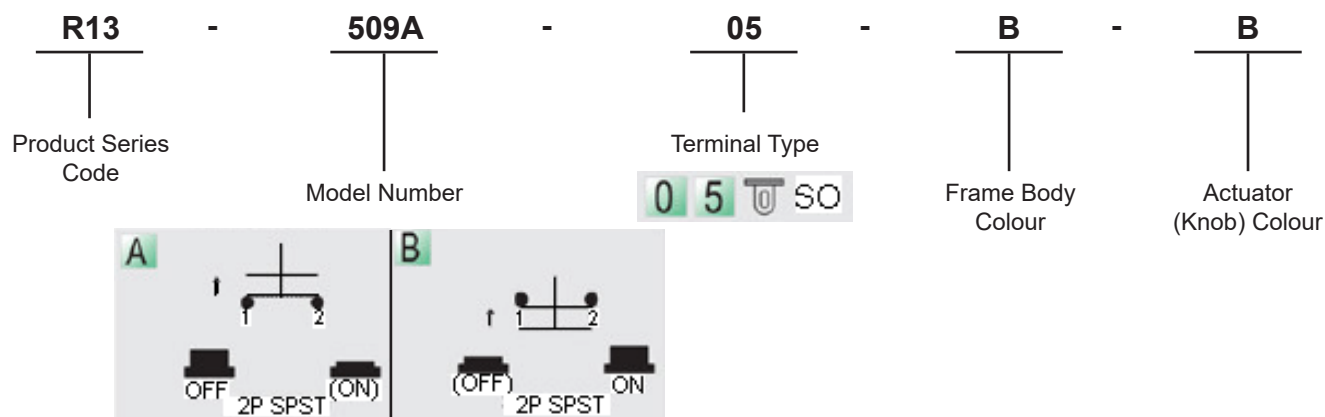


Dimensions : Millimetres

Part Number Table

Description	Circuit	Part Number
Switch, Push Button, SPNO, MOM	2P SPST OFF-(ON)	R13-509A-05-BB
Switch, Push Button, SPNC, MOM	2P SPST ON-(OFF)	R13-509B-05-BB
Switch, Push Button, SPNO, MOM	2P SPST OFF-(ON)	R13-509A-05-BR
Switch, Push Button, SPNC, MOM	2P SPST ON-(OFF)	R13-509B-05-BR

Part Number Explanation:



Frame Body Colour : B = Black.
 Actuator (Knob) Colour : B = Black and R = Red.

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.