## Features:

- Microminiature size
- Crisp, yet light, detent action
- Mounting options -"Plug-In" or "Snap-In"
- Solderless, solder, or

PC termination options

- Contacts completely enclosed


SNAP-IN SWITCH


These microminiature switches have electrical contacts completely enclosed by insulating plastic for protection from hostile environments. They are available in two mounting options... "Snap-In" for panel mount and "Plug-In" for circuit board mount... neither of which require mounting hardware. Actuating force is light... yet detent action is crisp... because of CW's patented detent method. And termination is easy - plug into PC board, hand solder to properly shaped terminal tails, or use a standard solderless connector.
These CW switches are designed for use where there is very little space available, and yet switching reliability and protection from hostile environments are required. Typical applications include electric shavers and similar motor-driven appliances; computer and telecommunications equipment where crowded PC boards adapt best to our switch size and insulated housings; and in electrical test gear requiring reliable low-voltage and low-current switching.


Type G-105 Plug-In ACTUAL SIZE Uses only . 08 square inches on PC board.

## Type G-105 Plug-In SPST



Spring-loaded self-cleaning
CONST


## Ratings ${ }^{\circ}$

| TYPE | ELECTRICAL <br> RATING | LISTING |
| :---: | :---: | :---: |
| G-105 | 0.5 A at $125 \mathrm{Vac-Vdc}$ <br> 0.25 A at 250 Vac | U.L. \& C.S.A. <br> U.L. \& C.S.A. |
| G-107 | 0.5 A at $125 \mathrm{Vac-Vdc}$ | U.L. \& C.S.A. |

*Recognized under the Component Recognition Program of Underwriter Laboratories, Inc., and certified by Canadian Standards Association. (UL File No. E9556, CSA File No. LR20985)

## Performance ${ }^{+}$

## Endurance -

Greater than 100,000 cycles, 10 milliamps at 9 Vdc resistive
Greater than 100,000 cycles, 10 microamps at 5 Vdc
Greater than 15,000 cycles, 2.0 A at 2.4 Vdc Greater than 6000 cycles, 1 A at 125 Vac
Greater than 6000 cycles, 0.5 A at 125 Vdc
Contact Resistance - Less than 10 milliohms before and 50 milliohms after endurance test

SPECIFIC into housing minimizes the possibility of wicking.

Type G-105 Plug-In SPST
Pre-formed sturdy terminals snap positively into PC board. No other mounting means necessary.


## ATIONS

Dielectric Withstanding Voltage - 2000 volts rms - 1 minute minimum
Capacitance - Less than 1.0 pF
Operating Temperature $-105^{\circ} \mathrm{C}$ ambient maximum, $-20^{\circ} \mathrm{C}$ minimum
Storage Temperature $-40^{\circ} \mathrm{C}$ to $105^{\circ} \mathrm{C}$
Humidity - After 100 hrs . at $95 \%$ relative humidity, $50^{\circ} \mathrm{C}$ and drying for 1 hr . at $27^{\circ} \mathrm{C}$, insulation resistance is greater than $10^{\circ}$ megohms
and Soldering - Use no more than 30 watt iron for no more than 4 seconds in contact with terminal

## Materials+

Button - Type 6/6 nylon
Housing - Glass-filled nylon - 94 V-0
Spring - Music wire
Actuator - Glass-filled nylon
Terminal Board - Glass-filled nylon - 94V-0
Moving Contact - Copper alloy
Center Contact and Terminal - Copper, plated End Contact and Terminal - Copper, plated Contact Plating - Standard is silver; also available with $30 \mu^{\prime \prime}$ gold over $50 \mu^{\prime \prime}$ nickel if quantities are sufficient.

## ACCESSORIES

Toppers - Shown is topper that can change your panel appearance and product styling.
Hot Stamping - Functional or decorative marking of your choice can be imprinted on "Topper" or housing surface with CW's "inhouse" facilities.
Colors - CW stores molding powders in many colors. "Toppers", buttons, and housings are available in a variety of colors if your quantity is sufficient.


Available circuit configurations for Type G-107 switches.

NOTE: Contact numbers and their orientation correspond to the orientation of numbered contacts in PC layout. Blue - Indicates current flow between contacts.

| CIRCUIT CONFIGURATION |  |  |
| :---: | :---: | :---: |
| ivfe | Posmion 1 | POSIIION 2 |
| G-107.1 | $15$ | $10^{30}$ |
| G.107-2 | $1 \stackrel{L}{4}^{\leftarrow}$ | $10^{\overrightarrow{50}-102}$ |
| G.107.3 |  | $10 \overrightarrow{30}$ |
| G.107-4 |  | $\begin{aligned} & 10 \\ & 10 \end{aligned} \rightarrow \text { 有 }$ |
| G-107-5 | $\begin{aligned} & 4 \\ & { }_{1} 1 \end{aligned}$ | $\begin{aligned} & 40 \\ & 10 \end{aligned} \underbrace{3}_{0}$ |
| G-107-6 | $\begin{array}{lll} 104 & \mathrm{O}_{3} \\ 1 \\ 1 \end{array}$ | $\begin{aligned} & 10 \mathrm{Be}-\mathrm{m}_{2}^{3} \\ & 10 \end{aligned}$ |
| G-107.7 | ${ }_{1}^{4} \overleftarrow{O}_{\mathrm{O2}}$ | $10 \overrightarrow{s 0} L_{10}$ |

## CW PATENTS

CW Engineers are constantly trying to upgrade the quality and cost effectiveness of our switches. Often this results in new inventions. Switch products shown in this catalog may be covered by one or more of the following U.S. Patents:
3,270,149
3,993,881
3,271,535
4,404,437
3,311,719
4,128,745
3,461,252
4,410,232

Other patent applications are pending.

## CARE IN USE OF SWITCHES

CW switches will perform properly if they are installed and used properly. Causes for failure often encountered in the field that are the responsibility of the user are:

1. Removal of factory applied lubricants from switch contacts and moving parts.
2. Introduction of foreign material into switching mechanism... flux, solder, cleaning materials, and potting compounds.
3. Restriction of movement of switch button.
4. Excessive heat often introduced while soldering.
5. Switching loads in excess of rating.

Users are cautioned to avoid misusing switches and to test and approve switches for acceptability in end application. CW has no knowledge of and makes no representation with respect to the usefulness and/or merchantability of any product that is made to buyer's special engineering specifications.

## HOW TO ORDER

Specify CW part number by referencing drawing that shows switch of your choice. If switch you require differs from drawing, specify differences from options available. Contact CW for information on the following CW products:

## Switches

| Standard Slide Switches: | - One through four poles <br> - Two through four positions <br> - 3 A through $13 \mathrm{~A} @ 125 \mathrm{~V}$ <br> - |
| :--- | :--- |
| MiC |  |

## Connectors

IDC: CW Industries also manufacturers a comprehensive product line of insulation displacement connectors, including Socket, Header, D-Subminiature, Card Edge, DIP, and PCB connectors. Available in commercial and military grades.
Custom designed switches and connectors to meet special requirements are also available; consult factory.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for Slide Switches category:
Click to view products by CW Industries manufacturer:
Other Similar products are found below :
6-1437581-1 M43R MHS123K15D MHS133K MHSS1104A MMD GH49S010001 MSS12A EPS1PC1 1825074-1 1825160-3 1825167-2 1825289-7 K232CB $25139 N L D B$ 25449NAH SLB1240R45 1825078-1 1825080-4 1825269-1 1825270-2 STS141RA04 T2215BEN506 GH46P000001 GH46W000001 GH49P010001 25339NA M42A TG36P000000 TG36P000050 AYZ0202AG 47227LFE 49331L 50208L L203091MS02Q 4-1437581-7 X2225CR-437W 49329L 1101M1S3ZB8E2 1-1437581-1 MSS2225G04 TG39W000000 1825075-1 MSS42G TG36WS80065 T105S1CWZBE SLB124145 SLB1280R5 SLB1340R45 $25136 N L D B$

