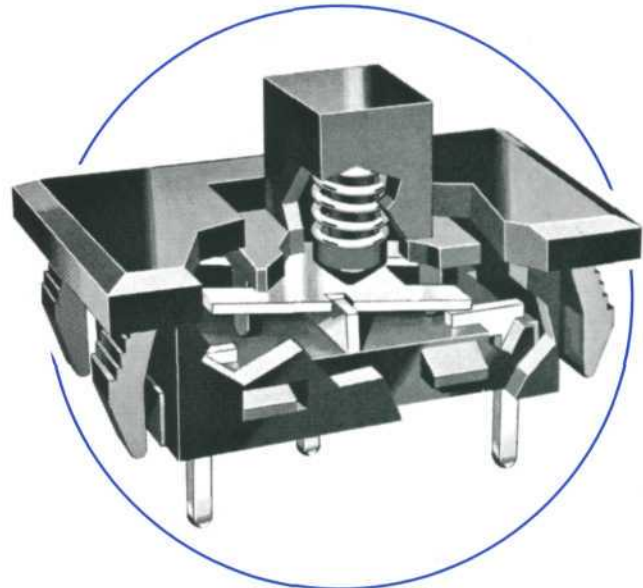
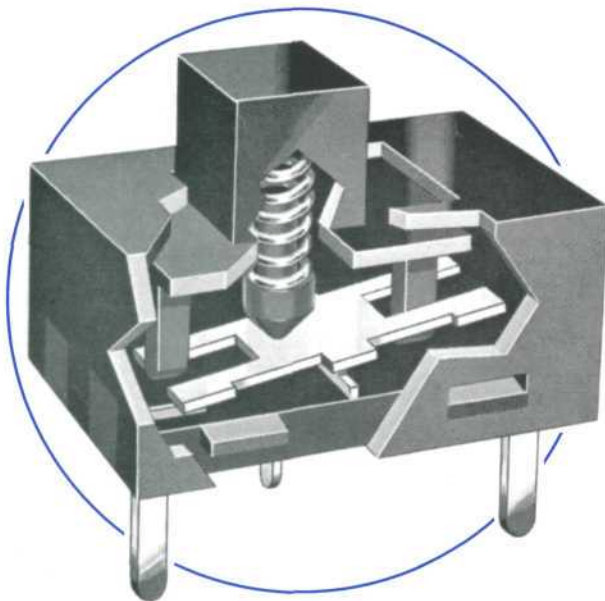


**Features:**

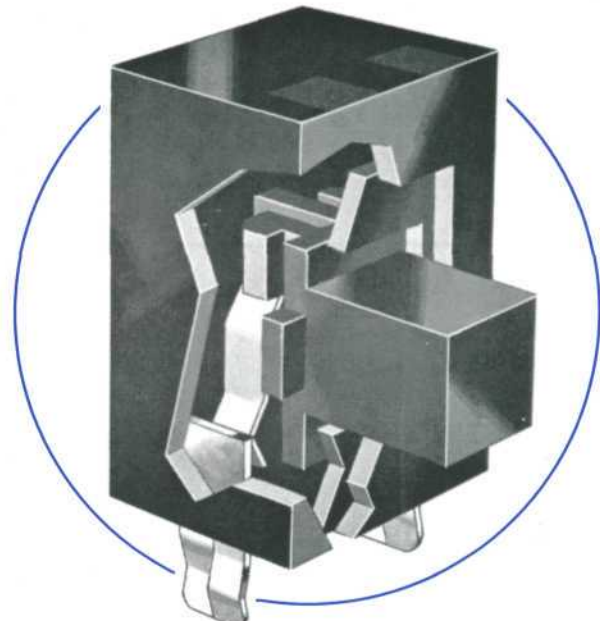
- Microminiature size
- Crisp, yet light, detent action
- Mounting options – “Plug-In” or “Snap-In”
- Solderless, solder, or PC termination options
- Contacts completely enclosed



SNAP-IN SWITCH



PLUG-IN SWITCH



UPRIGHT PLUG-IN SWITCH

ISO 9001:2000 REGISTERED

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.

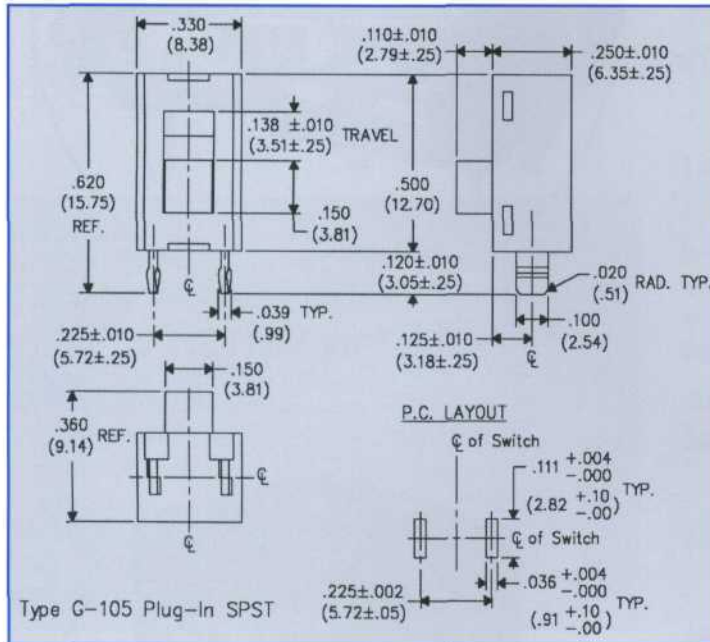
These CW switches are designed for use where there is very little space available, and yet switching reliability and protection from hostile environments are required. Typical applications include electric shavers and similar motor-driven appliances; computer and telecommunications equipment where crowded PC boards adapt best to our switch size and insulated housings; and in electrical test gear requiring reliable low-voltage and low-current switching.



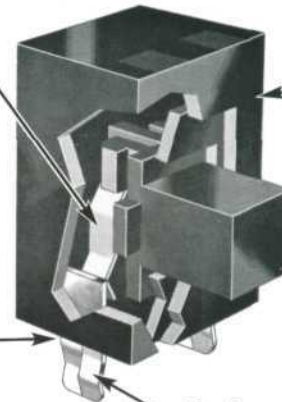
Type G-105 Plug-In  
ACTUAL SIZE  
Uses only .08 square inches on PC board.

CONST

### Type G-105 Plug-In SPST



Spring-loaded self-cleaning moving contact.



Completely enclosed contacts for environmental protection.

Press-fit terminals into housing minimizes the possibility of wicking.

Pre-formed sturdy terminals snap positively into PC board. No other mounting means necessary.

Type G-105 Plug-In SPST

### Ratings\*

TYPE	ELECTRICAL RATING	LISTING
G-105	0.5 A at 125 Vac-Vdc 0.25 A at 250 Vac	U.L. & C.S.A. U.L. & C.S.A.
G-107	0.5 A at 125 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

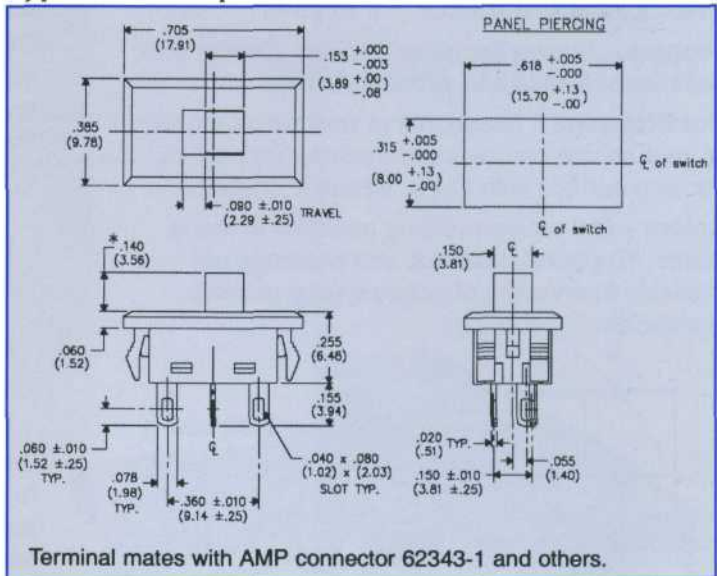
Greater than 6000 cycles, 0.5 A at 125 Vdc

**Contact Resistance –** Less than 10 milliohms before and 50 milliohms after endurance test

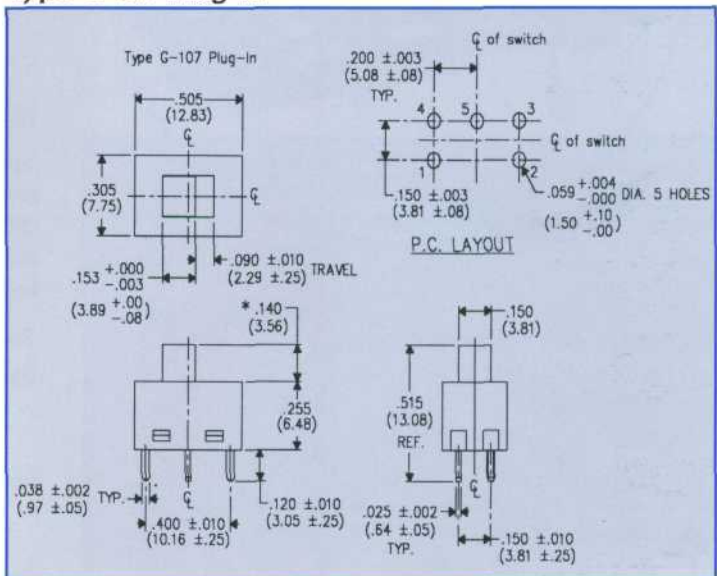
SPECIFIC

\*Performance specifications and materials described herein are general and end application. Consult factory for specifications for specific models.

## Type G-107 Snap-In



## Type G-107 Plug-In



Type G-107SI Snap-In  
ACTUAL SIZE

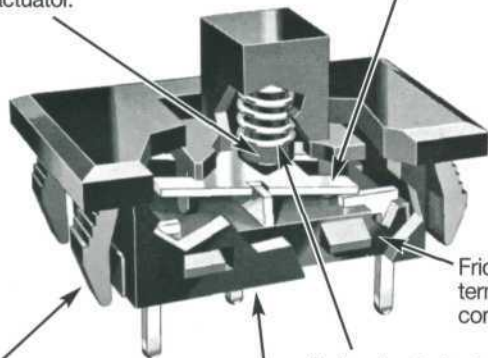


Type G-107 Plug-In  
ACTUAL SIZE

## CONSTRUCTION

Unique sliding action in combination with rotation of "seesaw" moving contact provides wiping action that ensures contact cleanliness.

Spring-loaded center actuator.



Friction fit of terminals keeps contaminants out.

Spring-loaded actuator minimizes contact resistance.

Molded enclosure protects contact surfaces.

## Type G-107 SI Snap-In

Easy panel mounting - Switch snaps into place with positive locking-in panels 0.047", 0.062", 0.078", or 0.093" thick.

## OPERATING CONDITIONS

**Dielectric Withstanding Voltage** - 2000 volts rms - 1 minute minimum

**Capacitance** - Less than 1.0 pF

**Operating Temperature** - 105°C ambient maximum, -20°C minimum

**Storage Temperature** - -40°C to 105°C

**Humidity** - After 100 hrs. at 95% relative humidity, 50°C and drying for 1 hr. at 27°C, insulation resistance is greater than 10<sup>9</sup> megohms

**Welding 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 μ" gold over 50 μ" nickel if quantities are sufficient.

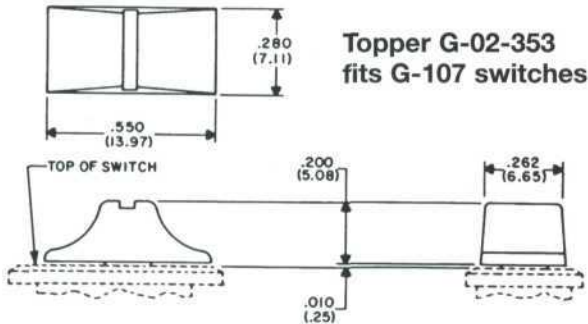
\*Specifications that vary depending on the switch construction specified.  
s. Specifications subject to change without notice.

## 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.

TYPE	CIRCUIT CONFIGURATION	
	POSITION 1	POSITION 2
G-107-1	1 → 5	1 O → 3 O
G-107-2	1 → 5 O 2	1 O → 5 → 2
G-107-3	1 → 5	4 O → 3 O
G-107-4	1 → 5	4 O → 1 O
G-107-5	1 → 5 O 3	4 O → 3 → 2
G-107-6	1 → 5 O 3	4 O → 5 → 2
G-107-7	1 → 5 O 2	4 O → 5 → 2

## 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.

**cw** INDUSTRIES

130 James Way, Southampton, PA 18966-3838 • Tel. 215-355-7080 • Fax 215-355-1088 • www.cwind.com

## 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
- Two through four positions
- 3A through 13A @ 125V AC

#### Miniature Slide Switches:

- One through four poles
- Two through four positions
- 3A through 13A @ 125V AC

#### MicroMiniature Slide Switches:

- One and two poles
- Two and three positions
- .5A @12V AC

#### Fully Enclosed

#### Microminiature Slide Switches:

- One pole
- One or two position
- .5A @12V AC

#### Rocker and

#### Power Slide Switches:

- One and two poles
- One & two positions & center-off
- Miniature and standard sized
- 8A through 16A @125V AC

### 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.**