Rotaries

## General Specifications

#### **Electrical Capacity (Resistive Load)**

Logic Level: 0.4VA maximum @ 28V AC/DC maximum

(Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)

Note: Find additional explanation of operating range in Supplement section.

#### Other Ratings

**Contact Resistance:** 80 milliohms maximum

**Insulation Resistance:** 500 megohms minimum @ 500V DC **Dielectric Strength:** 500V AC minimum for 1 minute minimum

**Mechanical Life:** 50,000 operations minimum **Electrical Life:** 50,000 operations minimum

For Rockers 1.70N; for Paddles 1.30N **Nominal Operating Force:** 

Angle of Throw:

#### **Materials & Finishes**

**Actuator:** Glass fiber reinforced polyamide (UL94V-0)

Case: Glass fiber reinforced polyamide (UL94V-0)

**Sealing Ring:** Nitrile butadiene rubber **Movable Contact:** Phosphor bronze with gold plating

**Stationary Contacts:** Phosphor bronze with gold plating

Glass fiber reinforced polyamide (UL94V-0) Base:

Phosphor bronze with tin plating **Mounting Bracket:** Phosphor bronze with gold plating Terminals:

#### **Environmental Data**

**Operating Temperature Range:** -30°C through +85°C (-22°F through +185°F)

90 ~ 95% humidity for 240 hours @ 40°C (104°F) **Humidity:** 

Vibration: 10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning

in 1 minute; 3 right angled directions for 2 hours

Shock: 50G (490m/s²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

#### **PCB Processing**

Soldering: Wave Soldering Recommended: See Profile A in Supplement section.

Manual Soldering: See Profile A in Supplement section..

These devices are not process sealed. Hand clean locally using alcohol based solution. Cleaning:

#### Standards & Certifications

Flammability Standards: UL94V-0 actuator & case/base

> The GW Series rockers have not been tested for UL recognition or CSA certification. These switches are designed for use in a low-voltage, low-current, logic-level circuit.

When used as intended in a logic-level circuit, the results do not produce hazardous energy.

Rockers

Keylocks Programmable Illuminated PB Pushbuttons

### Distinctive Characteristics

Various colored rockers and paddles.

Combination of dust cover and closely fit housing, actuator, and interior pivot provides protection for contacts.

Detent mechanism design of coil spring, plunger, and plastic detent results in crisp and positive actuation.

Extremely thin size allows high density PCB mounting and makes these switches ideal for handheld equipment.

Award-winning STC contact mechanism with benefits unavailable in conventional mechanisms: smoother, positive detent actuation, increased contact stability and unparalleled logic-level reliability. (Additional STC details in Terms & Acronyms; see Supplement section.)

Molded-in, epoxy sealed terminals lock out flux and other contaminants.

.100" x .100" (2.54mm x 2.54mm) terminal spacing conforms to standard PC board grid spacing for straight and angle mounting.



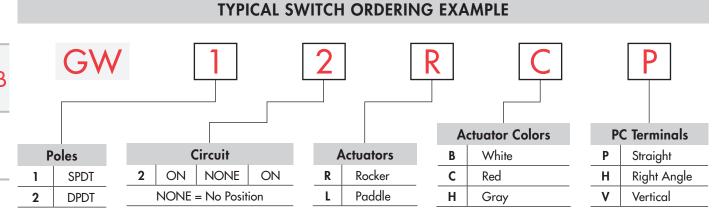
Actual Size





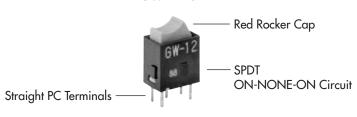
Slides

# Supplement | Accessories



#### DESCRIPTION FOR TYPICAL ROCKER ORDERING EXAMPLE

#### **GW12RCP**

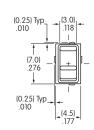


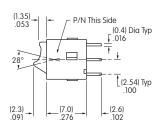
| POLES & CIRCUIT |       |                                    |        |      |                     |        |         |  |
|-----------------|-------|------------------------------------|--------|------|---------------------|--------|---------|--|
|                 |       | Rocker Position NONE = No Position |        |      | Connected Terminals |        |         | Throw & Schematics                                     |
| Pole            | Model | Up                                 | Center | Down | Up                  | Center | Down    | Note: Terminal numbers are not actually on the switch. |
| SP              | GW12  | ON                                 | NONE   | ON   | 5-6                 | OPEN   | 5-4     | SPDT 4 • 5 (COM)                                       |
| DP              | GW22  | ON                                 | NONE   | ON   | 5-6 2-3             | OPEN   | 5-4 2-1 | DPDT 4• 5 (COM) 2 • 3                                  |

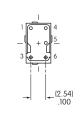
#### TYPICAL SWITCH DIMENSIONS

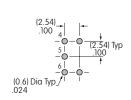
#### **Straight PC**











**Single Pole** 

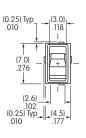
On single pole models positions 1 & 3 are support pins.

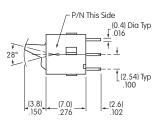
#### Straight PC

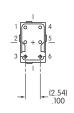
**GW12RCP** 

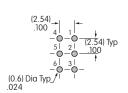










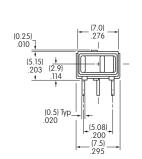


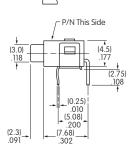
**Double Pole** 

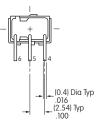
#### TYPICAL SWITCH DIMENSIONS

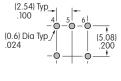
#### **Single Pole**

Right Angle PC







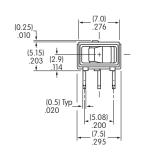


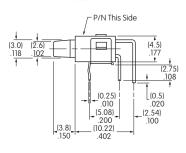


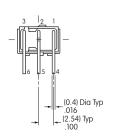
**GW12RCH** 

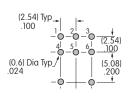
**Double Pole** 

Right Angle PC







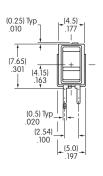


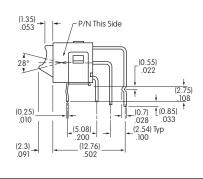


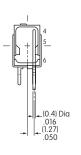
**GW22LCH** 

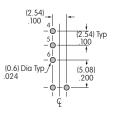
#### **Single Pole**

**Vertical PC** 







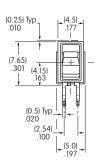


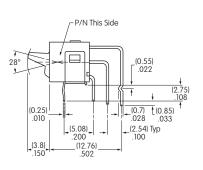


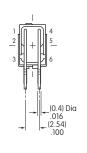
**GW12RCV** 

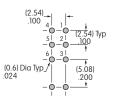
#### **Double Pole**

**Vertical PC** 











**GW22LCV**