# General Specifications

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

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

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

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

#### Other Ratings

80 milliohms maximum **Contact Resistance:** 

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

Mechanical Life: 100,000 operations minimum for On-None-On & On-Off-On

50,000 operations minimum for other circuits

Electrical Life: 100,000 operations minimum for On-None-On & On-Off-On

50,000 operations minimum for other circuits

**Nominal Operating Force:** .81N for momentary & 1.06N for maintained

Angle of Throw: 28°

#### **Materials & Finishes**

**Actuator:** Glass fiber reinforced polyamide Glass fiber reinforced polyamide Case:

Sealing Rings: Nitrile butadiene rubber

**Movable Contact:** Phosphor bronze with gold plating **Stationary Contacts:** Phosphor bronze with gold plating Base:

Glass fiber reinforced polyamide Terminals: Phosphor bronze with gold plating

#### **Environmental Data**

**Operating Temperature Range:** -25°C through +85°C (-13°F through +185°F)

90 ~ 95% humidity for 96 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)

#### Installation

Cap Installation Force: 39.1N (8.8 lbf) maximum downward force on actuator

#### PCB Processing

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

Manual Soldering: See Profile A in Supplement section.

Cleaning: Automated cleaning. See Cleaning specifications in Supplement section.

#### Standards & Certifications

The G 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

Rotaries

Ė

## Distinctive Characteristics

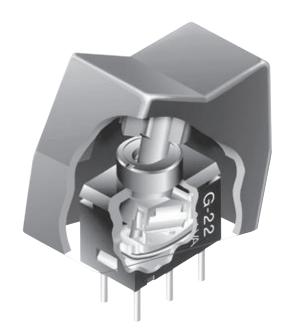
Ultra-miniature size allows high density mounting, and extremely light weight of 0.25 gram makes these switches ideal for handheld equipment.

Totally sealed body construction prevents contact contamination and allows time-and money-saving automated soldering and cleaning.

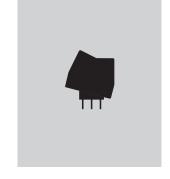
Award-winning STC contact mechanism with benefits unavailable in conventional mechanisms: smoother, positive detent actuation, increased contact stability and unparalleled logic-level reliability. (Additional STC details in Terms & Acronyms; see Supplement section.)

 $.100'' \times .100'' (2.54 \text{mm} \times 2.54 \text{mm})$ terminal spacing conforms to standard PC board grid spacing. Round terminals facilitate easier through-hole mounting on PC boards.

Matching indicators available.



Actual Size

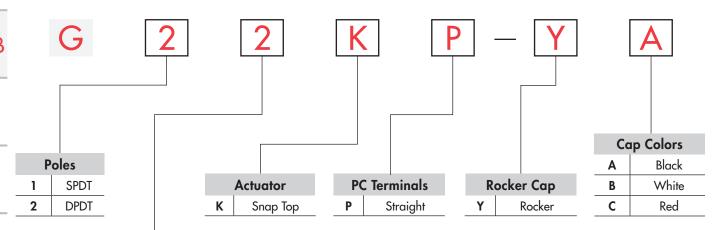




Slides

Touch

### TYPICAL SWITCH ORDERING EXAMPLE



Circuits			
2	ON	NONE	ON
3	ON	OFF	ON
5	ON	NONE	(ON)
8	(ON)	OFF	(ON)
9	ON	OFF	(ON)
( ) = Momentary			

NONE

**OFF** 

**OFF** 

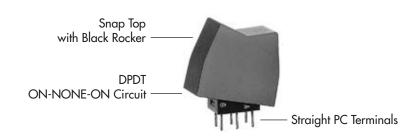
(ON)

(ON)

(ON)

## **DESCRIPTION FOR TYPICAL ORDERING EXAMPLE**

**G22KP-YA** 



#### **Rocker Position Connected Terminals Throw & Schematics** ( ) = Momentary Up Center Down Up Center Down Terminal numbers are Note: Pole Model not actually on the switch. G12 NONE ON ON G13 ON OFF ON 5 (COM) SP G15 ON NONE (ON) 5-6 **OPEN** 5-4 **SPDT** G18 (ON) OFF (ON) **G19** ON **OFF** (ON) **G22** NONE ON ON G23 ON OFF ON

**OPEN** 

5-4 2-1

**DPDT** 

**POLES & CIRCUITS** 

(COM)

DP

**G25** 

**G28** 

**G29** 

ON

(ON)

ON

5-6 2-3

#### **ACTUATOR**



**Snap Top for Rocker** 

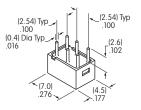




## **PC TERMINALS**



Straight



## **ROCKER CAP & COLORS**



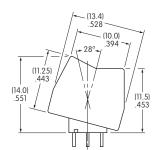
AT4062 Rocker

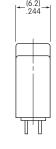
Material: Polyamide Finish: Matte

Colors Available: A, B, C



Actual Size





Color Codes:



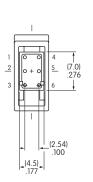


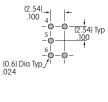


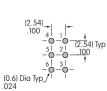
## TYPICAL SWITCH DIMENSIONS

Single & Double Pole

P/N This Side (4.0) Dia\_ .156 (0.4) Dia Typ .016 (2.54) Typ \_(7.0) \_.276 .551









Straight PC

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

G23KP-YA

## **Mouser Electronics**

**Authorized Distributor** 

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NKK Switches:

G19KP-YC-RO G19KP-YC