

General Specifications

B 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
Nominal Operating Force:	1.0N
Angle of Throw:	28°

Materials & Finishes

Actuator:	Polycarbonate resin (UL94V-0)
Case:	Glass fiber reinforced polyamide (UL94V-0)
Sealing Ring:	Nitrile butadiene rubber
Base:	Glass fiber reinforced polyamide
Movable Contact:	Phosphor bronze with gold plating
Stationary Contact:	Phosphor bronze with gold plating
Terminals:	Phosphor bronze with gold plating

Environmental Data

Operating Temperature Range:	-25°C through +55°C (-13°F through +131°F)
Humidity:	90 ~ 95% humidity for 240 hours @ 40°C (104°F)
Vibration:	10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 5 minutes; 3 right angled directions for 2 hours
Shock:	50G (490m/s ²) acceleration (tested in 3 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.
Cleaning:	These devices are not process sealed. Hand clean locally using alcohol based solution.

Standards & Certifications

Flammability Standard: UL94V-0 actuator & case

The GW Series illuminated paddles 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.

Distinctive Characteristics

World's smallest fully illuminated paddles for highly visible status indication; LEDs available in red, green, or amber for single color and red/green for bicolor.

Specially designed switching mechanism provides crisp actuation feedback to positively indicate circuit transfer.

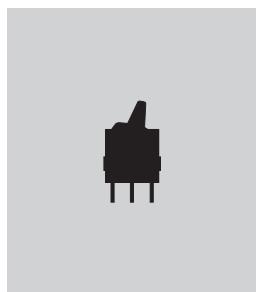
Insert molded terminals prevent entry of flux and other contaminants.

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



Actual Size



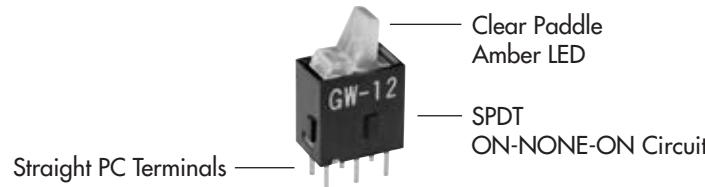
Supplement	Accessories	Indicators	Touch	Tilt	Slides	Rotaries	Keylocks	Programmable	Illuminated PB	Pushbuttons	Rockers	Toggle
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TYPICAL SWITCH ORDERING EXAMPLE

GW	1	2	L	J	P	D
Pole	Circuit		Actuator			LED Colors
1 SPDT	2 ON	NONE	ON	L Paddle		Single Color
					PC Terminals	
					P Straight	C Red
					H Right Angle	D Amber
					V Vertical	F Green
						Bicolor
						CF Red/Green
				Actuator Color		
				J Clear		

DESCRIPTION FOR TYPICAL PADDLE ORDERING EXAMPLE

GW12LJP



POLE & CIRCUIT

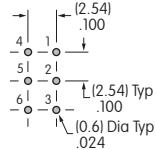
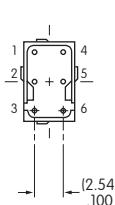
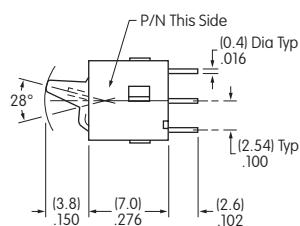
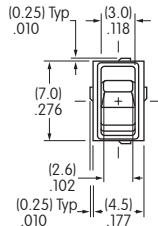
		Paddle Position			Connected Terminals			Throw & Schematics			
Pole	Model	Up	Center	Down	Up	Center	Down	Note: Terminal numbers are not actually on the switch. LED circuit is isolated and requires an external power source.			
SP	GW12	ON	NONE	ON	2-3	OPEN	2-1	SPDT	3	2 (COM)	1
									(5) O	(5) O	(4) Red
									(5) O	(5) O	(6) Green
											Bicolor

LED COLORS & SPECIFICATIONS

	Colors	Single Color			Bicolor
		C Red	D Amber	F Green	CF Red/Green
Maximum Forward Current	I_{FM}	30mA	30mA	25mA	30mA/25mA
Typical Forward Current	I_F	20mA	20mA	20mA	20mA/20mA
Forward Voltage	V_F	2.0V	2.0V	2.1V	2.0V/2.1V
Maximum Reverse Voltage	V_{RM}	5V	5V	5V	5V/5V
Current Reduction Rate Above 25°C	ΔI_F	No Current Reduction Rate within Ambient Temperature Range			
Ambient Temperature Range		-25°C ~ +55°C			

TYPICAL SWITCH DIMENSIONS

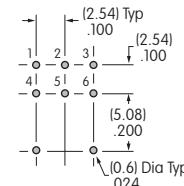
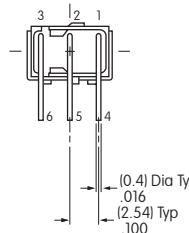
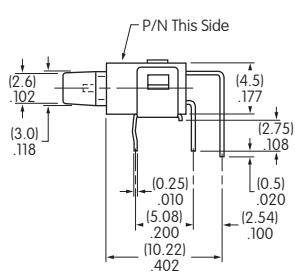
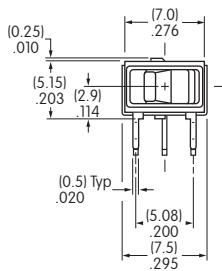
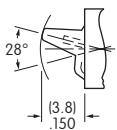
Straight PC



5 & 6 are LED terminals; 4 is a support pin on single color models & an LED terminal on bicolor models.

GW12LJPC

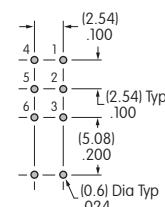
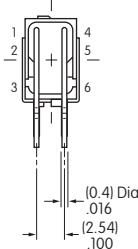
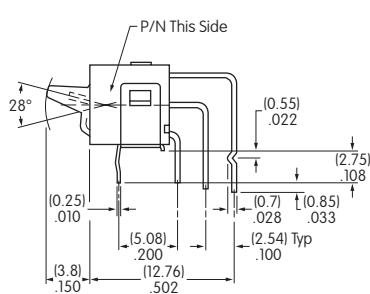
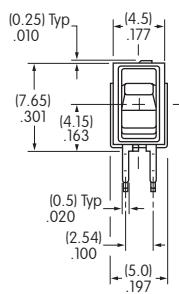
Right Angle PC



5 & 6 are LED terminals; 4 is a support pin on single color models & an LED terminal on bicolor models.

GW12LJHD

Vertical PC



5 & 6 are LED terminals; 4 is a support pin on single color models & an LED terminal on bicolor models.

GW12LJVCF