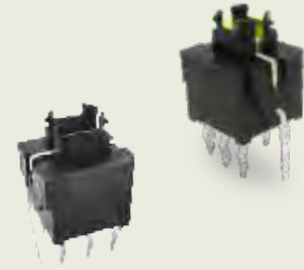




Pushbutton Switches PG Series



General Specification

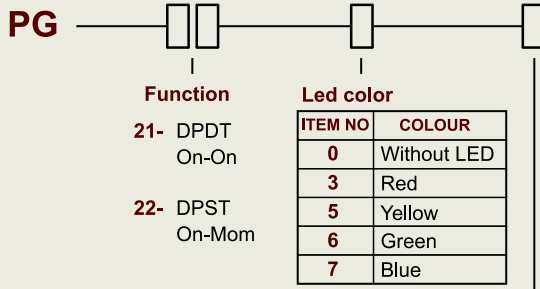
CIRCUIT : DPDT
RATING : 0.1A, DC30V MAX/100mA, DC1.5V MIN
CONTACT RESISTANCE : 50 mΩ MAX.
INSULATION RESISTANCE : 100 MΩ MIN.
ELECTRICAL LIFE : 50,000 cycles
ACTUATION FORCE : 250 ± 100g
TRAVEL:
 1. Full Travel : 1.5 ± 0.4mm
 2. Contact Travel : 1.0 ± 0.4mm
OPERATING TEMPERATURE RANGE : -20°C to 70°C

Materials

CASE : LCP, black.
HOUSING : Glass filled Nylon 6/6, black.
ACTUATOR : Glass filled Nylon 6/6, gray.
CONTACT : Copper alloy, silver plated.
TERMINALS : LCP, black & Copper alloy, silver plated.

How to Order

MODEL NO. FUNCTION LED COLOR CAP OPTION



TYPE	Switch Action	
	PG	Normal ON
1-2 4-5		2-3 5-6
LED Circuit	L1 —▶— L2	

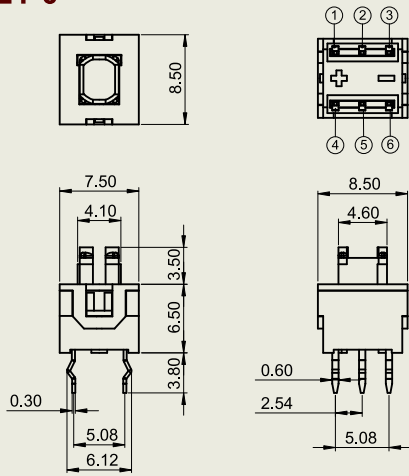
Cap option

Shape				
Dimensions				
Transparent with Diffuser	C044TD	C043TD	—	—
Transparent	C044T	C043T	—	—
Ice	C044A	C043A	C045A	C046A
Snow	C044B	C043B	C045	C046B
Transparent Black	—	—	C045C	C046C
White	C0444	C0434	—	—

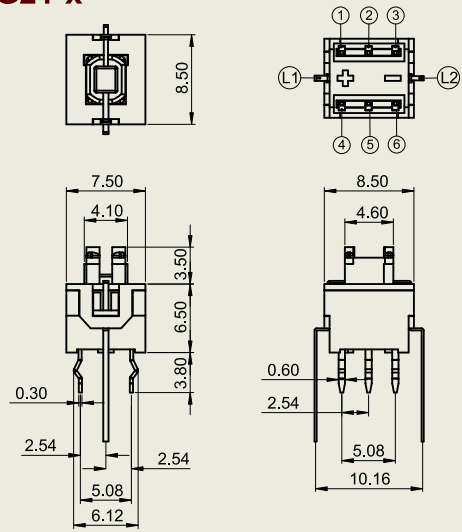
SPECIFICATION SHEET

Dimensions

PG21-0



PG21-x



LED Electro-optical data

* The LED specification for reference only

Lens Appearance	Color	Electro-optical Data(AT 20mA)				Peak wavelength	Viewing Angle 2θ 1/2 (deg)
		Vf (V)		Iv (mcd)			
		Typ.	Max.	Min.	Typ.		
Water Clear	Red	1.95	2.5	80	200	630	140°
	Yellow	2	2.5	300	400	590	140°
	Green	3.3	4.1	400	500	525	140°
	Blue	3.3	4	80	190	470	140°

SPECIFICATION SHEET

PG SERIES SPECIFICATION Test Sequence

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
①	Visual Examination	Visual Examination check without any external force applied	There shall be no defects that affect the serviceability of the product.
②	Contact Resistance	@1.5VDC 100mA for both silver and gold plated contacts.	50mΩ Max.
③	Insulation Resistance	Measurements shall be made following application of 500 V/DC potential across terminals and cover. for 1 minute.	100MΩ min/500VDC
④	Dielectric Withstanding Voltage	500 VAC (50Hz or 60Hz) shall be applied across terminals and cover for 1 minute.	There shall be no breakdown or flashover.
⑤	Actuation Force	Model-1305N Mechanical Test	Force: 250+/-100g Lock series force 350+/-100g
⑥	Travel	1. Full Travel 2. Contact Travel	1. 1.5+/-0.4mm 2. 1.0+/-0.4mm
⑦	Operating Life	Measurements shall be made following the test below: (a) 100mA, 1.5VDC (b) Rate of operation: 15-20 operations per minute. (c) Electrical Life Test: 50,000 cycles	(1) Shall conform to the limits in items ③ & ④. (2) Contact Resistance: 100mΩ Max. (3) Force: Within +/-30% of specification.
⑧	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for 1 hour before the measurements are made: (a) Temperature -20±3°C. (b) Time 96 hours.	Shall conform to the limits in items ② to ④.
⑨	Resistance High Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before the measurements are made: (a) Temperature 70±2°C . (b) Time 96 hours.	Shall conform to the limits in items ② & ④.
⑩	Resistance Humidity	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before the measurements are made: (a) Temperature 40±2°C. (b) Relative Humidity 90~95%. (c) Time 96 hours.	Shall conform to the limits in items ② to ④.
⑪	Wave Soldering	Wave Soldering (1) Soldering Temperature: 260+/- 5°C. (2) Duration of Solder Immersion: 5 ±1 Seconds. (3) PCB is 1.6mm thickness. (4) Solder coverage 75% min.	Shall be free from pronounced backlash and falling-off or breakage of terminals. Shall conform to the limits in items ② to ④.

SPECIFICATION SHEET

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Manual Soldering

Manual Soldering

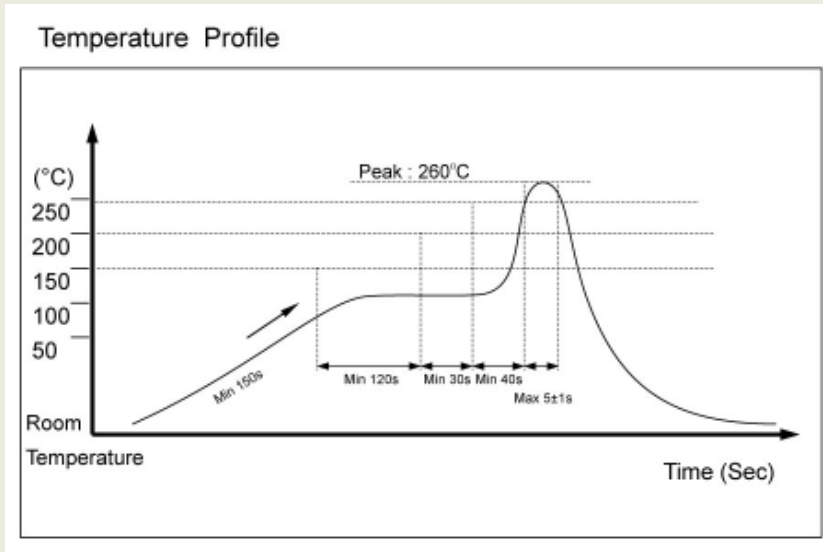
- (1) Soldering Temperature: 350°C max.
- (2) Duration of Solder Heat: 5 ± 1 Seconds.

Shall be free from pronounced backlash and falling-off or breakage of terminals.

Shall conform to the limits in items 2 to 4.

Soldering Conditions

Wave Soldering



(PCB is 1.6mm in thickness)

Precautions in Handling:

Care should be exercised so that flux from the upper part of the printed circuit board does not adhere to the switch.

Please ensure there is no flux over the surface of the PCB.

SPECIFICATION SHEET