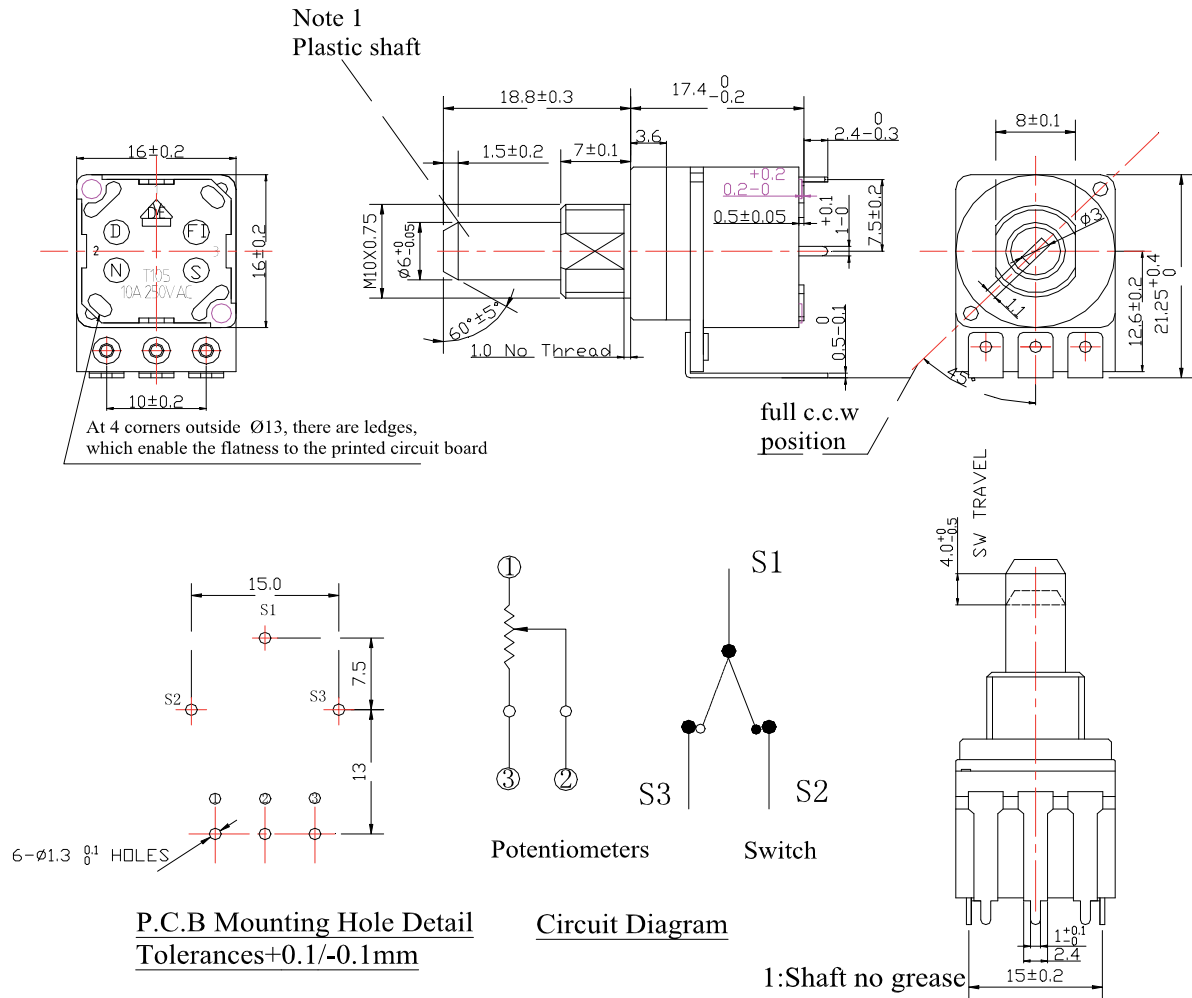


Potentiometers

Rotary Potentiometer with Push Switch P/N: GP16R-40F3-18.8R-0B47K-52



All specifications are restricted to QA test criteria.
DRW: G.L. ZHAO CHK: P.G. KAO APP: T. LIU DC: 2009-02-19, UPD: 2025-05-19.

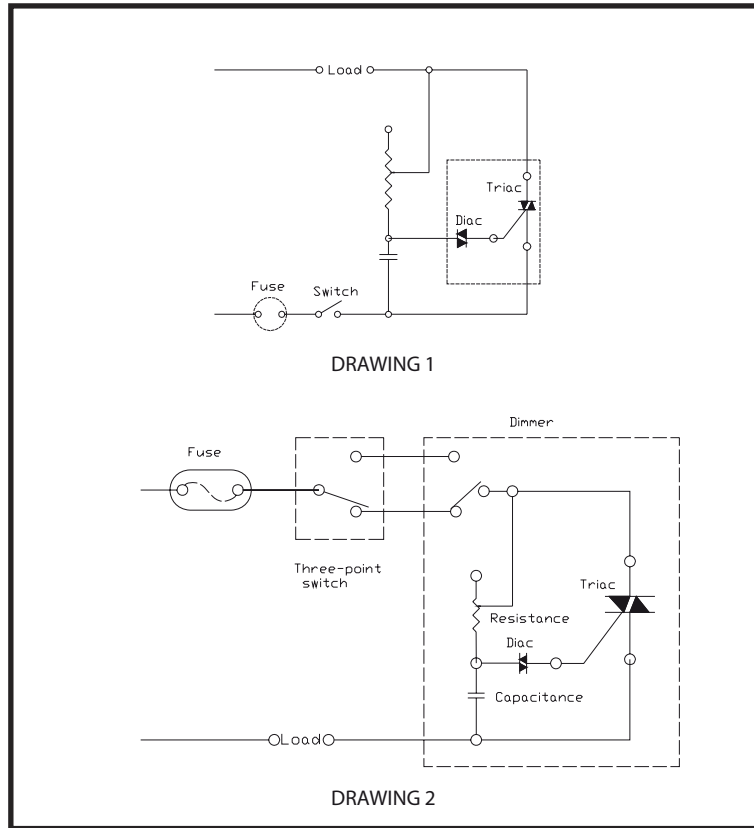
Potentiometers

Rotary Potentiometer with Push Switch P/N: GP16R-40F3-18.8R-0B47K-52

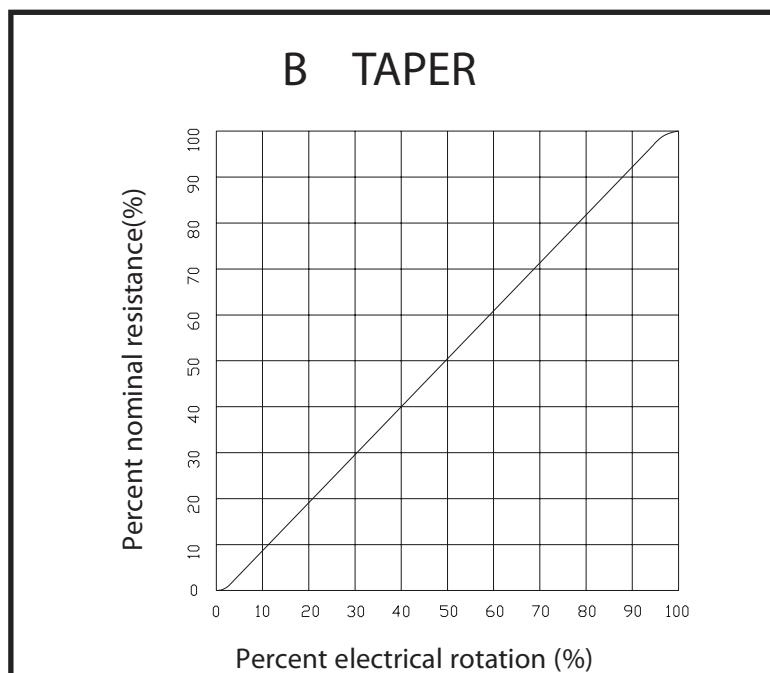
CHARACTERISTICS

1-Carbon plate		Switch working force	15± 3N
Resistance range	B(linear)47KΩ	Temperature Range	-25℃～105℃ (at normal voltage)
Rated power	0.2W 105℃	Click position	37detents (Step angle 7.5°±5°Applied with detent type)
Power rating is based on continuous full load operation at the maximum voltage between terminal 1 and 3. Power rating vs. ambient temperature shall be as denoted on the following graph (at 0.2W):		Welding tin temperature	260℃±5℃:≤3s
		Bushing nut tightening	80Ncm(8Kgf)min
		Detent torque	0.8- 1.5Ncm Applied for with detent type
2-General		3-Contact	
Maximum Resistance	±10%	Switch circuit	SPDT
Maximum working voltage	AC250V	Material	Special silver alloy
Taper	B	Switch contact resistance	Max.100m Ω
4-Switch contact ratings (Resistive)			
Insulation resistance	Min.100MΩ at DC500V	Nominal load	10A AC250V cos phi=1
Dielectric strength	AC2KV1minute (between individual switch terminals and case/shaft)	Max. Switching Power	2,500W
<ul style="list-style-type: none"> Apply Ac 2kv for 1 min, between individual switch terminals and case/shaft , without damage to parts, arcing or breakdown etc. before20,000 cycles life cycle test. Apply Ac 1.5kv for 1 min, between individual switch terminals and case/shaft , without damage to parts, arcing or breakdown etc. after 20,000 cycles life cycle test. 		Max. Switching Voltage	AC250V,DC150V
Humidity stocking: 48h at 95% humidity and 30℃, take out and do high voltage test: open contacts 1250V. Test time 1 min. No breakdown or sparkover allowed.		Max. Switching Current	10A
Total Rotation Angle	270°±5°	Max. Current	15A
Rotational noise	≤47mv	Min. Switching Load	DC5V, 100mA
Residual resistance	≤1%R	5-Life	
Rotation Torque	0.2 - 1.5 Ncm	Switch life	50,000 cycles (10~17 times/minute)
Shaft stop strength	50Ncm	Potentiometer life	30,000 cycles (10~17 times/minute)
Switch working stroke	4.0 +0/-0.5mm	6-Push and pull sterngh of shaft	
		Push and pull static load of 8Kgf shall be applied to the shaft in the axial direction for 10 seconds.No abnormality in electric characteristics and operating feeling.	

PRODUCT CIRCUIT DIAGRAM



STANDARD RESISTANCE TAPER



COMMON SPECIFICATION OF SOLDERING

Soldering shall be carried out under the following condition:

- 1 Substrate to be soldered: Copper clad laminated phenol board of 1.6mm thick.
- 2 Specific gravity of flux: 0.82(applied by foam fluxer)
- 3 Foam head: The foam head should be limited to the height which is half of the board to be soldered. No flux should be allowed to run up onto the board's surface.
- 4 Preheating: Surface temperature of the substrate is allowed to be heated up, at most, to 100°C, and sustain at the respective temperature for two minutes as a maximum.
- 5 Conventional soldering: To be performed within 10 seconds at 260°C or below.
(This item is not recommended for and applicable in reflow soldering)
- 6 Manual soldering: To be performed within 3seconds at 350°C ±5°C

Either item 1-5 or 1-6 should not be carried out more than 2 times.

The conditions stipulated above are only applicable to conventional soldering but not reflow soldering. If your soldering implementation suggests otherwise, please provide your specific soldering requirement.