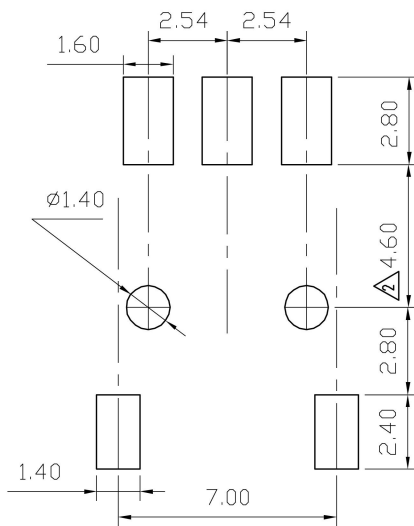
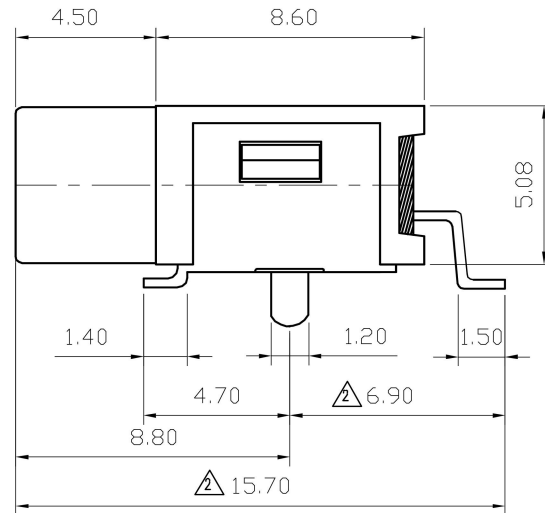
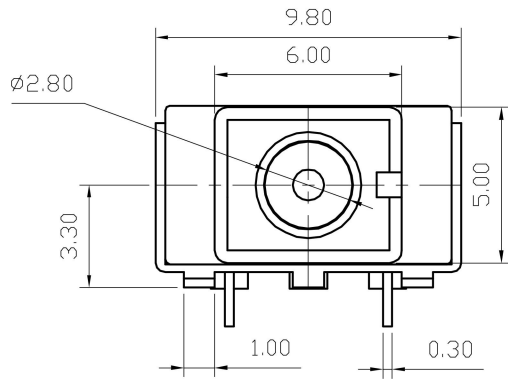


DATA SHEET

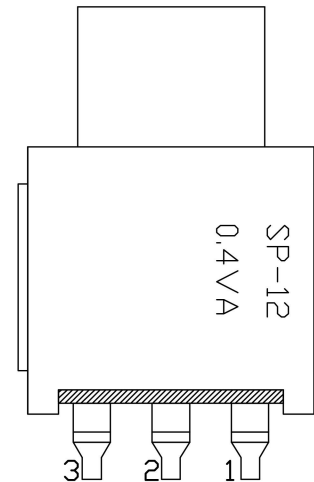
SUNGMUN CODE : SP-12FH-S-TR
DESCRIPTION : PUSH SWITCH

SUNGMUN ELECTRONICS CO., LTD.

Address 301-302,Bucheon Technopark 345, Seokcheon-ro, Ojeong-gu
Bucheon-si, Gyeonggi-do, Korea
TEL. +82-32-328-1941~4
FAX +82-32-328-1945
E-mail sungmun@sungmun.co.kr
Website www.sungmun.com



P.C.B DIMENSION



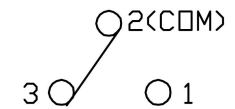
CIRCUIT

NORMAL DOWN

ON (ON)
2-3 1-2

< > MOMENTARY

SCHEMATICS



NOTE: GENERAL TOLERANCE ±0.3			APPD	CHKD	DSGD	MODEL
△	16.06.22	(6.80-6.90), (4.5-4.6), (15.60-15.70)				PUSH BUTTON SWITCH
△	11.12.20	(6.40-6.80), (4.4-4.5), (15.20-15.60), (2.5-2.8)	LEE K.I	ROH J.P	PARK S.M	PART NAME SP-12FH-S
NO.	DATE	DESCRIPTION	SUNGMUN ELECTRONICS CO.,LTD			Rev.3

1. Electrical Characteristics :

- 1-1 Rating: 0.4VA at 28V AC or DC Max.
- 1-2 Contact Resistance: Max 50 mΩ
- 1-3 Insulation Resistance: Min 500 MΩ at DC 500V
- 1-4 Withstanding Voltage: 1 minute at AC 500V
- 1-5 Life Cycle: 20,000 cycles
- 1-6 Operating Temperature: -25°C ~ +80°C

2. Mechanical Characteristics :

- 2-1 Operating Force: 250±100gf
- 2-2 Travel: 1.1mm
- 2-3 Insulator: Fiberglass reinforced polyamide.
- 2-4 Terminal: Brass, Gold plate.

3. High, Low Temperature Test :

- 3-1 Test Condition: 80°C±3°C for 48 hours
-25°C±3°C for 48 hours
- 3-2 Insulation Resistance: Min 500 MΩ at DC 500V
- 3-3 Withstanding Voltage: 1 minute at AC 500V
- 3-4 Contact Resistance: Max 50 mΩ

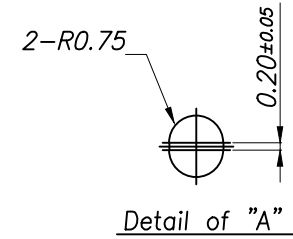
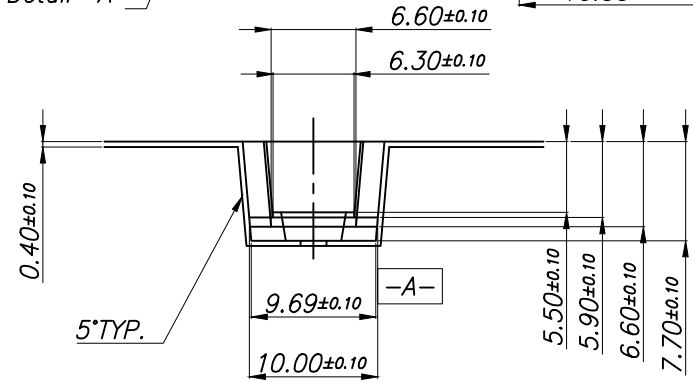
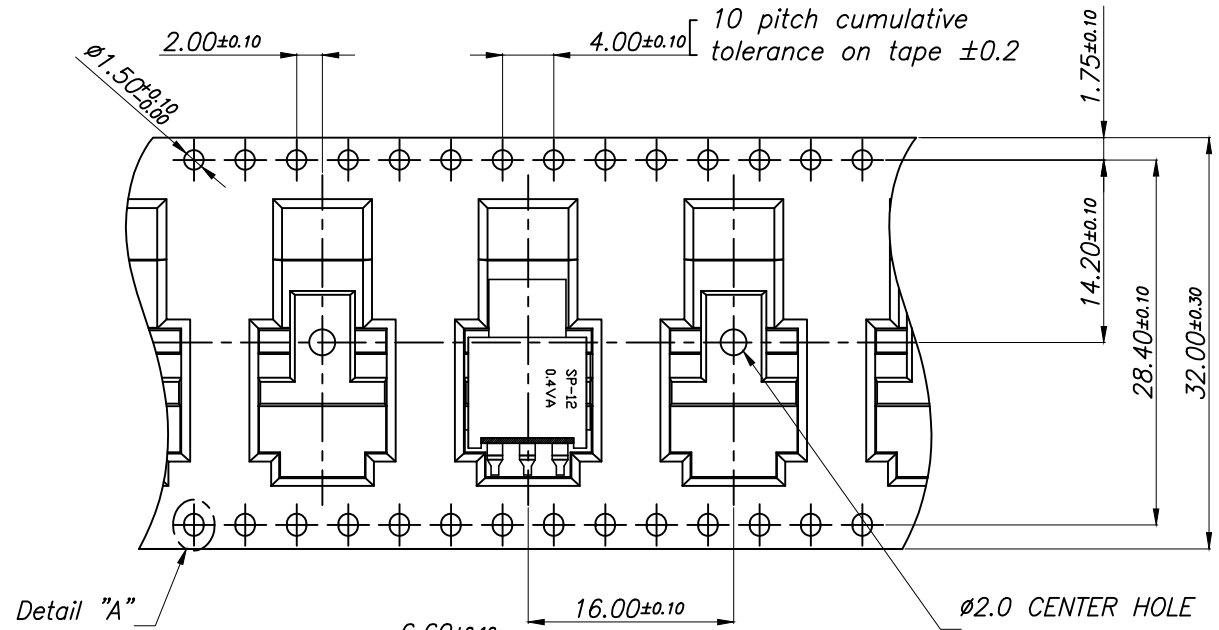
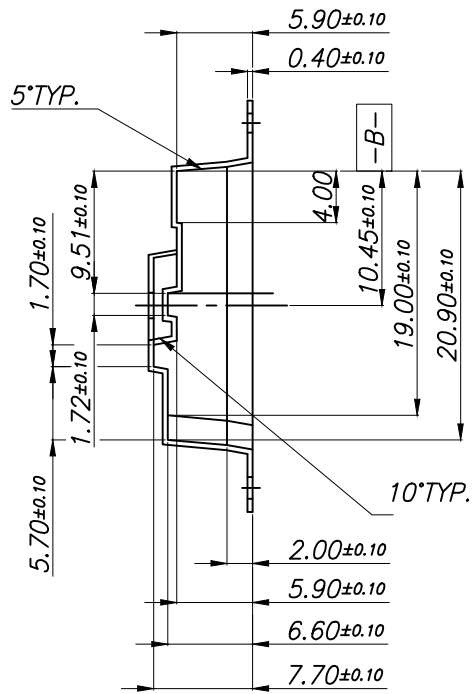
4. Humidity Test :

- 4-1 Test Condition: Measured 3 hours after exposure to ambient after 96 hours exposure at
40°C±2°C, 90-95% R.H
- 4-2 Insulation Resistance: Min 10 MΩ
- 4-3 Withstanding Voltage: 1 minute at AC 500V
- 4-4 Contact Resistance: Max 50 mΩ

5. Solder Condition :

- 5-1 Within 5 sec. at 270°C

MOLD NO. 32M/M-19



- NOTES: (UNLESS OTHERWISE SPECIFIED)
- 10 SPROCKET HOLE PITCH CUMULATIVE TOL ± 0.2
 - CAMBER NOT TO EXCEED 1mm IN 100mm.
 - MATERIAL : BLACK CONDUCTIVE POLYSTYRENE.
 - Ao & Bo MEASURED ON A PLANE 0.3mm ABOVE THE BOTTOM OF THE POCKET.
 - Ko MEASURED FROM A PLANE ON THE INSIDE BOTTOM OF THE POCKET TO THE TOP SURFACE OF THE CARRIER.
 - POCKET POSITION RELATIVE TO SPROCKET HOLE MEASURED AS TRUE POSITION OF POCKET, NOT POCKET HOLE.
 - ALL DIMENSIONS ARE IN MILLIMETERS.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		SCALE	NON SCALE		TITLE		
TOLERANCE		DATE	2003.10.21		Reel PACKING		
DECIMALS X.X ±0.13 X.XX ±0.10	ANGULAR ± 1°	DRAWN	DESIGNED	CHECKED			APPROVED
DO NOT SCALE DRAWING		W.J LEE		J.P ROH	K.J LEE	MODEL NO	Push Button Switch
UNIT mm						SP -12FH-S	
THIRD ANGLE PROJECTION		SUNGUN ELECTRONICS CO.,LTD					