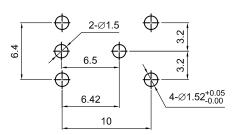


# **SCHEMATIC**

# P.C.B. LAYOUT





## **SPECIFICATIONS**

1.2

6.4

1. RATING: 30VDC 6 A

2. CONTACT RESISTANCE :  $100 \text{ m}\Omega$  MAX.

3. INSULATION RESISTANCE : 500 VDC ,  $100 \text{M}\Omega$  MIN.

4. OPERATION TEMPERATURE: -20°C~ +70°C

5. OPERATION FORCE: 300±150 gf

6. OPERATING LIFE: 6,000 CYCLES

7. FULL TRAVEL: 3.8mm±0.3mm

3					DATE	2009/05/13	UNIT	mm	MODE	PUSH BUTTON SWITCH
2					APPROVAL	KAVEN	SCALE	1:1	PART	PS015-PLAA
Δ					CONFIRM	ALAN	VIEW	⊕ □	2D FILE NAME	PS015-PLAA
	DATE	APPROVAL	DESIGN	ENGINEERING CHANGE DESCRIPTION	DESIGN	zcj	VER.	01	3D FILE NAME	



# SPECIFICATIONS OF PS015 SERIES POWER PUSH BUTTON SWITCHES

1. POLE - POSITION: SPST.

2. RATING: 30V DC 2A, 6A.

3. OPERATING TEMPERATURE RANGE :  $-20^{\circ}$ C  $\sim 70^{\circ}$ C

#### 4. ELECTRICAL PERFORMANCE.

	ITEM	TEST CONDITIONS	CRITERIA		
4-1	CONTACT	DC 1.5V 100mA BY METHOD	$100 \text{ m}\Omega$ MAX.		
	RESISTANCE	OF VOLTAGE DROP.			
4.2	INSULATION	DC 500V	100 MΩ MIN.		
4-2	RESISTANCE	DC 300 V	100 MISZ MIIN.		
4.2	DIELECTRIC	AC 500V 1 MINUTE	BREAKDOWN IS NOT		
4-3	STRENGTH	BETWEEN TERMINALS	ALLOWALE.		

#### 5. MECHANICAL PERFORMANCE

	ITEM	TEST CONDITIONS	CRITERIA
5-1	OPERATING FORCE	LOCK TYPE	300±150gf
5-2	TRAVEL	FULL TRAVEL	3.8±0.3 mm
5-3	ROBUSTNESS OF TERMINAL	500gf FOR 1 MINUTE	TERMINAL COULD BE BENT BUT LOOSENED TERMINAL OR BASE FRAME BROKEN IS NOT ALLOWABLE.
5-4	ROBSTNESS OF ACTUATOR	TO APPLY A STATIC LOAD 2Kgf VERTICALLY TO END OF ACUTATOR TO PUSH IT FOR15 SECONDS.	ACTUATOR BROKEN OR ANY UNUSUAL APPEARANCE OCCURRED ON SWITCH ONSTRUCTION IS NOT ALLOWABLE.
5-5	SOLDERABILITY	260±5℃ IN 3 SECONDS	SOLDER COVERAGE 75% Min.

## 6. RESISTANCE OF SOLDERING HEAT

6-1 MANUAL SOLDERING: 300±5°C IN 3 SECONDS

6-2 DIP SOLDERING: 260±5°C IN 3 SECONDS

7. DURABILITY: AFTER 6,000 LIFE CYCLES

7-1 CONTACT RESISTANCE : 150 m $\Omega$  MAX.

7-2 OPERATING FORCE : WITHIN THE RANGE OF  $\pm 30\%$  OF

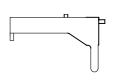
OPERATING FORCE SPECIFICATION.

7-3 INSULATION RESISTANCE AND DIELECTRIC STRENGTH SHALL MEET THE REQUIREMENTS OF 4-2 AND 4-3.

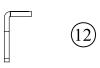
## 8. ENVIRONMENTAL PERFORMANCE

	ITEM TEST CONDITIONS		CRITERIA			
			1. IT SHOULD MEET REQUIREMENTS			
8-1	COLD	-20°C±2°C FOR 48 HOURS	OF ITEM 4.			
			2. MECHANICAL PERFORMANCE			
			SHOULD REMAIN TO NORMAL.			
			1. CONTACT RESISTANCE SHOULD			
		70°C±2°C FOR 48 HOURS	BE LESS THAN 150 mΩ.			
8-2	DRY HEAT		2. IT SHOULD MEET REQUIREMENTS			
8-2			OF 4-2 AND 4-3.			
			3. MECHANICAL PERFORMANCE			
			SHOULD REMAIN TO NORMAL.			
			1. CONTACT RESISTANCE SHOULD			
			BE LESS THAN 150 mΩ.			
			2. INSULATION RESISTANCE			
		40°C±2°C 90% ~ 95%RH	SHOULD BE HIGHER THAN 100 $\Omega$ .			
8-3	DAMP HEAT	FOR 48 HOURS	3. DIELECTRIC SHOULD MEET			
			REQUIREMENTS OF 4-3.			
			4. MECHANICAL PERFORMANCE			
			SHOULD REMAIN TO NORMAL.			

DIMENSION	TOLERANCE			
BELOW 10 mm	± 0.3			
10~100 mm	± 0.5			
ABOVE 100 mm	± 0.8			
ANGLE	± 3°			



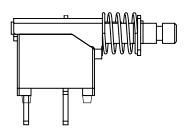






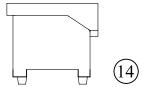






















NO.	PART NAME		QTY MATERIAL	SPECIAL DEAL	RoHS REPORT No.
1	COVER	1	STEEL		CE/2010/B3873
2	LOCK PIN	1	PHOSPHOR BRONZE		CE/2011/12722A
3	SPRING PLATE	1	PHOSPHOR BRONZE		CE/2011/12722A
4	ACTUATOR	1	PA66 101L	BLACK	CE/2010/B4129
5	ROLLER BALL	1	SAE1015		CE/2010/B4129
6	SPRING	1	STAINLESS STEEL		CE/2010/B3872
7	SPRING STOPPER	1	STEEL PLATE		KA/2010/70927; CE/2010/C5613
8	SPRING PLATE	1	PHOSPHOR BRONZE		CE/2011/12722A
9	MOVING CONTACT	1	PHOSPHOR BRONZE		CE/2011/12722A
10	RIVET	1	Ag . Ni		CE/2011/12724A; CE/2010/C5617; CE/2010/C5613
11	RIVET	1	Ag . Ni		CE/2011/12724A; CE/2010/C5617; CE/2010/C5613
12	TERMINAL	1	BRASS	SILVER PLATING 0.5μm MIN	CE/2011/12724A; CE/2010/C5617
13	TERMINAL	1	BRASS	SILVER PLATING 0.5μm MIN	CE/2011/12724A; CE/2010/C5617
14	FRAME	1	PA66 70G33L	BLACK	CE/2011/51995 ; CE/2011/21636 ; CE/2011/21637

3					DATE	2011/11/18	UNIT	mm	MODE	PUSH BUTTON SWITCH
$\triangle$					APPROVAL	KAVEN	SCALE	1:1	PART	PS015-PLAA MATERIALS LIST
$\triangle$					CONFIRM	ALAN	VIEW	<b>♦ □</b>	2D FILE NAME	PS015-PLAA MATERIALS LIST
	DATE	APPROVAL	DESIGN	ENGINEERING CHANGE DESCRIPTION	DESIGN	YWL	VER.	01	3D FILE NAME	

