



Feature -

- OLED display panel on the switch button
- programmable text, graphic, and video display
- low power consumption
- resolution: 96*96 pixels, color mode: 65K
- SPST, momentary function

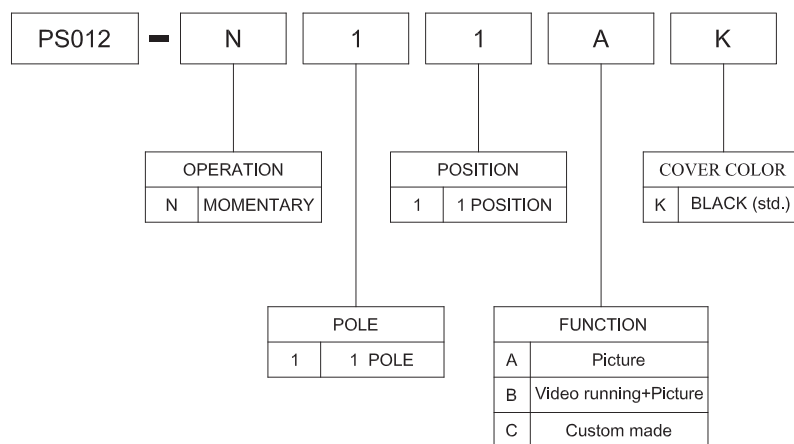
Application -

- audio / video switchers
- instrumentation, telecommunication
- broadcast system, security system
- POS (point of sale) system
- gambling machines

► **SPECIFICATIONS**

SWITCH SPECIFICATIONS	
POLE - POSITION	OFF - <ON> for Momentary Type , SPST
CONTACT RATING	50mA 12V DC
CONTACT RESISTANCE	200 mΩ MAX.
INSULATION RESISTANCE	100 MΩ MIN. 500 V DC
DIELECTRIC STRENGTH	Breakdown is not Allowable ; 500 V AC for 1 Minute
OPERATING FORCE	250 ± 100 gf
OPERATING LIFE	100,000 cycles
OPERATING TEMPERATURE RANGE	-20°C ~ 70°C
TOTAL TRAVEL	2.8 ± 0.2 mm

► **HOW TO ORDER**



PS012 SERIES

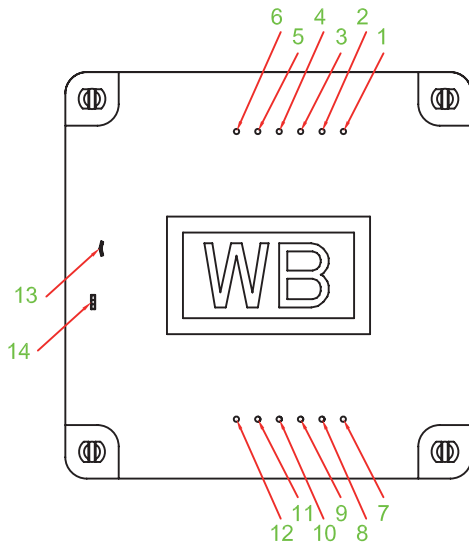
OLED DISPLAY PUSH SWITCH

► DIMENSION & FRAME TYPE

OLED ELECTRICAL CHARACTERISTICS

SYMBOL	PAPAMETER	CONDITIONS	MIN	TYP	MAX	Unit
V _{CC}	Dot operating voltage	-	14.5	15	15.5	V
V _{DD}	Logic operating voltage	-	2.4	2.8	3.3	V
V _{DDIO}	Logic I/O operating voltage	-	1.5	-	3.3	V
V _{IH}	High logic input voltage	-	0.8*V _{DDIO}	-	V _{DDIO}	V
V _{IL}	Low logic input voltage	-	0	-	0.4	V
V _{OH}	High logic output voltage	I _{OH} = -0.1mA	V _{DDIO} -0.4	-	-	V
V _{OL}	Low logic output voltage	I _{OL} = +0.1mA	-	-	0.4	V
I _I	Input leakage voltage	V _I = V _{DDIO} Or V _{SS}	-1.0	-	+1.0	uA
I _O	Output leakage voltage	V _I = V _{DDIO} Or V _{SS}	-1.0	-	+1.0	uA
F _{OSC1}	Oscillator frequency for Dot matrix	V _{DD} =2.8V	2.7	3	3.3	MHz

PIN ASSIGNMENT



Pin No.	Symbol	Name	Function
1	RXD	Serial Data In	Receive Data such as Picture from front PC
2	TXD	Serial Data Out	Transmit ACK message to confirm for PC
3	BCS	Chip enable	Enable current button to communicate
4	BCLK	Serial Clock In	Clock input for communication count
5	BSPIN	Serial Data in	Serial input data for communication
6	BSPOUT	Serial Data Out	Serial Output Data for communication
7	+3.3V	Input Power,VDD	Supply power for button
8	+3.3V	Input Power,VDD	Supply power for button
9	Alarm	Alarm	Button is pushed
10	GND	ground	Power ground for button
11	GND	ground	Power ground for button
12	CVBS	Composite	Composite video input from DVD etc
13	SW1	Switch Pin	Normally open
14	SW2	Switch Pin	Normally open

OLED MAXIMUM RATING

ITEM	MIN	MAX	UNIT	Condition	Remark
Supply Voltage(V _{DD})	-0.3	4	V	T _a =25°C	IC maximum rating
Supply Voltage(V _{DD})		18	V	T _a =25°C	IC maximum rating
Operating Temp	-40	70	°C		
Storage Temp	-40	85	°C		
Humidity		85	%		
Life Time	10,000	-	Hrs	100 cd/m ² , 50% checkerboard	Note (1)
Life Time	13,000	-	Hrs	80 cd/m ² , 50% checkerboard	Note (2)
Life Time	16,000	-	Hrs	60 cd/m ² , 50% checkerboard	Note (2)

OLED MECHANICAL DATA

	NO ITEM SPECIFICATION UNIT
1	Dot Matrix 96(W) x (RxGxB) x 96(H) dot
2	Dot Size 0.045(W) x 0.19(H) mm ²
3	Dot Pitch 0.07(W) x 0.21(H) mm ²
4	Aperture Rate 58 %
5	Active Area 20.135(W) x 20.14(H) mm ²
6	Panel Size 27.0(W) x 30.1(H) mm ²
7	Panel Thickness 1.21 ± 0.1 mm
8	Module Size 27(W) x 40.1(H) x 1.21(D) mm ³
9	Diagonal A/A size 1.12 inch
10	Module Weight 2.01 ±10% gram

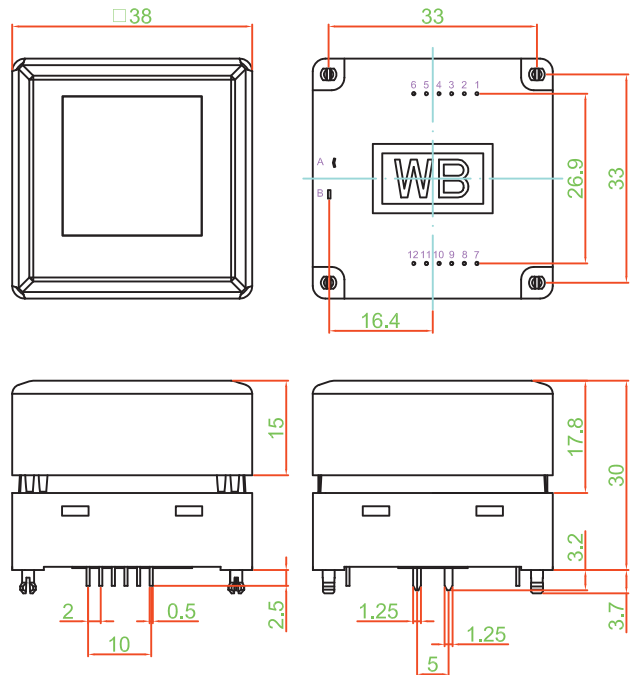
* 詳細資料請與公司業務聯繫 More details please check with our sales

▶ DIMENSION & FRAME TYPE

PS012-N11 □ □

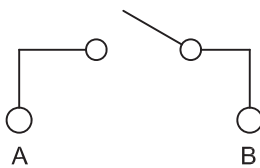


BOTTOM VIEW

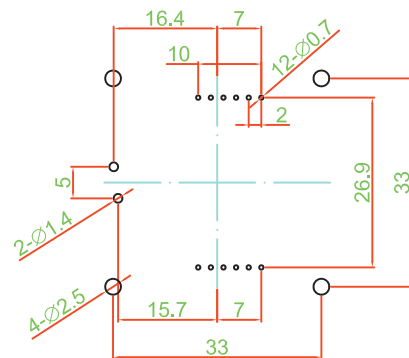


▶ SCHEMATIC

SWITCH



▶ P.C.B LAYOUT



▶ MATERIAL

- COVER : PC
- ACTUATOR : PA
- BASE FRAME : PA + GF
- TERMINAL : BRASS SILVER PLATING
- MOVING CONTACT : PHOSPHOR BRONZE
GOLD PLATING

▶ UNIT WEIGHT

- PS012-N11 □ □ : 35.5 ± 0.1 g / pc