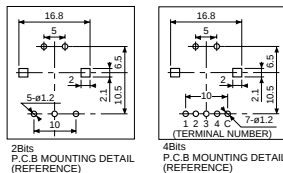


100

[illegible]

**P.C.B MOUNTING DETAIL
(REFERENCE)**

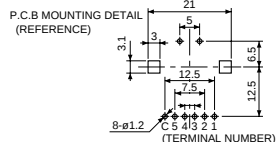
The diagram shows a side view of the component's mounting interface. Key dimensions include:

- Total width: 25
- Top flange width: 10.5
- Flange thickness: 7.5
- Mounting hole diameter: $\phi 6$
- Distance from top edge to mounting hole center: 3.4
- Distance between mounting holes: 10
- Bottom flange width: 12
- Bottom flange thickness: 0.5(P)
- Distance from bottom edge to mounting hole center: 12
- Overall height: 12.5 (6.5)
- Internal vertical dimension: 4.5
- Internal horizontal dimension: 3.4
- Internal vertical offset: 3
- Internal horizontal offset: 3.4
- Thread specification: M9 P=0.75
- Mounting surface indicator: MOUNTING SURFACE

(TERMINAL NUMBER)

A detailed view of the terminal arrangement is shown below the main drawing:

- Terminal pitch: 2.1
- Terminal width: 8- $\phi 1.2$
- Terminal length: 12.5
- Terminal spacing: 7.5
- Terminal numbering: GS 4/3 2/1
- Reference dimensions: 3.1, 3, 5, 6.5, 12.5



Technical drawing showing the P.C.B. MOUNTING DETAIL. The drawing includes dimensions for the mounting surface and the P.C.B. mounting detail.

MOUNTING SURFACE

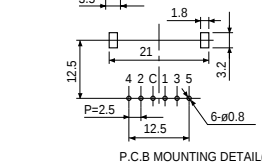
Dimensions for the mounting surface:

- Overall width: 12.5
- Distance from left edge to center of mounting hole: 8.9
- Distance from center of mounting hole to right edge: 7.9
- Distance from left edge to center of mounting hole: 4.6
- Distance from center of mounting hole to right edge: 3
- Distance from left edge to center of mounting hole: 4
- Distance from center of mounting hole to right edge: 8
- Distance from left edge to center of mounting hole: 0.5
- Distance from center of mounting hole to right edge: (6.15)
- Distance from left edge to center of mounting hole: 3.5
- Distance from center of mounting hole to right edge: 4.8
- Distance from left edge to center of mounting hole: 1.8
- Distance from center of mounting hole to right edge: 21
- Distance from left edge to center of mounting hole: 12.5
- Distance from center of mounting hole to right edge: 3.2
- Distance from left edge to center of mounting hole: 4
- Distance from center of mounting hole to right edge: 2
- Distance from left edge to center of mounting hole: 3
- Distance from center of mounting hole to right edge: 5
- Distance from left edge to center of mounting hole: 6- $\phi 0.8$

P.C.B. MOUNTING DETAIL

Dimensions for the P.C.B. mounting detail:

- Overall width: 12.5
- Distance from left edge to center of mounting hole: 8.9
- Distance from center of mounting hole to right edge: 7.9
- Distance from left edge to center of mounting hole: 4.6
- Distance from center of mounting hole to right edge: 3
- Distance from left edge to center of mounting hole: 4
- Distance from center of mounting hole to right edge: 8
- Distance from left edge to center of mounting hole: 0.5
- Distance from center of mounting hole to right edge: (6.15)
- Distance from left edge to center of mounting hole: 3.5
- Distance from center of mounting hole to right edge: 4.8
- Distance from left edge to center of mounting hole: 1.8
- Distance from center of mounting hole to right edge: 21
- Distance from left edge to center of mounting hole: 12.5
- Distance from center of mounting hole to right edge: 3.2
- Distance from left edge to center of mounting hole: 4
- Distance from center of mounting hole to right edge: 2
- Distance from left edge to center of mounting hole: 3
- Distance from center of mounting hole to right edge: 5
- Distance from left edge to center of mounting hole: 6- $\phi 0.8$



INA (2 Bits) (Standard)

The diagram illustrates the timing for the 74VHC595 shift register. It is divided into two sections: "CLOCKWISE ROTATION" and "COUNTER CLOCKWISE ROTATION".

CLOCKWISE ROTATION: This section shows the timing for a clockwise rotation. The clock signal (CLOCK) is a square wave with period T . The data signals for TERMINAL (A-C) and TERMINAL (B-C) are shown. The data for TERMINAL (A-C) is OFF during the first half of the clock cycle and ON during the second half. The data for TERMINAL (B-C) is OFF during the first half of the clock cycle and ON during the second half. The detent position is indicated by a vertical dashed line. The time interval ΔT is defined as $\Delta T = (0.15 \pm 0.1)T$.

COUNTER CLOCKWISE ROTATION: This section shows the timing for a counter-clockwise rotation. The clock signal (CLOCK) is a square wave with period T . The data signals for TERMINAL (A-C) and TERMINAL (B-C) are shown. The data for TERMINAL (A-C) is OFF during the first half of the clock cycle and ON during the second half. The data for TERMINAL (B-C) is OFF during the first half of the clock cycle and ON during the second half. The detent position is indicated by a vertical dashed line.

The diagram illustrates the timing requirements for the 74VHC595 shift register. It is divided into two sections: 'CLOCKWISE ROTATION' and 'COUNTER CLOCKWISE ROTATION'.

CLOCKWISE ROTATION: This section shows the timing for a clockwise rotation. The 'TERMINAL (A-C)' signal is a square wave with a period T . The 'TERMINAL (B-C)' signal is a square wave that is one half-period (ΔT) out of phase with the A-C signal. The 'DETENT POSITION' is indicated by a vertical dashed line. The relationship between ΔT and T is given by the formula: $\Delta T = (0.25 \pm 0.1) T$.

COUNTER CLOCKWISE ROTATION: This section shows the timing for a counter-clockwise rotation. The 'TERMINAL (A-C)' signal is a square wave. The 'TERMINAL (B-C)' signal is a square wave that is one half-period out of phase with the A-C signal. The 'DETENT POSITION' is indicated by a vertical dashed line.

Circuit	SPST
Rated Voltage/Rated Current	DC 16V 20mA
Contact Resistance	100mΩ max.
Insulation Resistance	10MΩ min. at DC 100V
Withstand Voltage	AC 100V for 1 minute
Push Travel	0.5mm
Operating Force	5 ± 1.5 N
Operational Life	10,000 actuations

■ GRAY CODE (For REB162, RE0201, REB202)

 $\text{O}=\text{ON}$

Terminal Number C=Common

*1, *2: GRAY code for REB162 and REB202 start at the position number 2.

	REB162		RE0201	REB202
Type of Output Signal	INA, INB (2 Bits)	GRAY *1 (4 Bits)	GRAY (5 Bits)	GRAY *2 (5 Bits)
Operating Temperature Range	-30 to 80°C	-30 to 80°C	-10 to 70°C	-30 to 80°C
Rated Voltage/Rated Current	DC 5V 0.5mA	DC 12V 4mA	DC 12V 10mA	DC 12V 5mA
Resolution	24 Pulses/360°	15 Positions/300°	24 Positions/360°	31 Positions/300°
Total Rotational Angle	360° Endless	300±5°	360° Endless	300±5°
Detent Position and Angle	24 Detents 15±3°	15 Detents 21.4±5°	24 Detents 15±3°	31 Detents 10±3°
Detent Torque	5 to 25 mN·m	5 to 25 mN·m	10 to 30 mN·m	15 to 35 mN·m
Rotational Life	50,000 cycles	30,000 cycles	10,000 cycles	30,000 cycles

- 
- NOBLE**