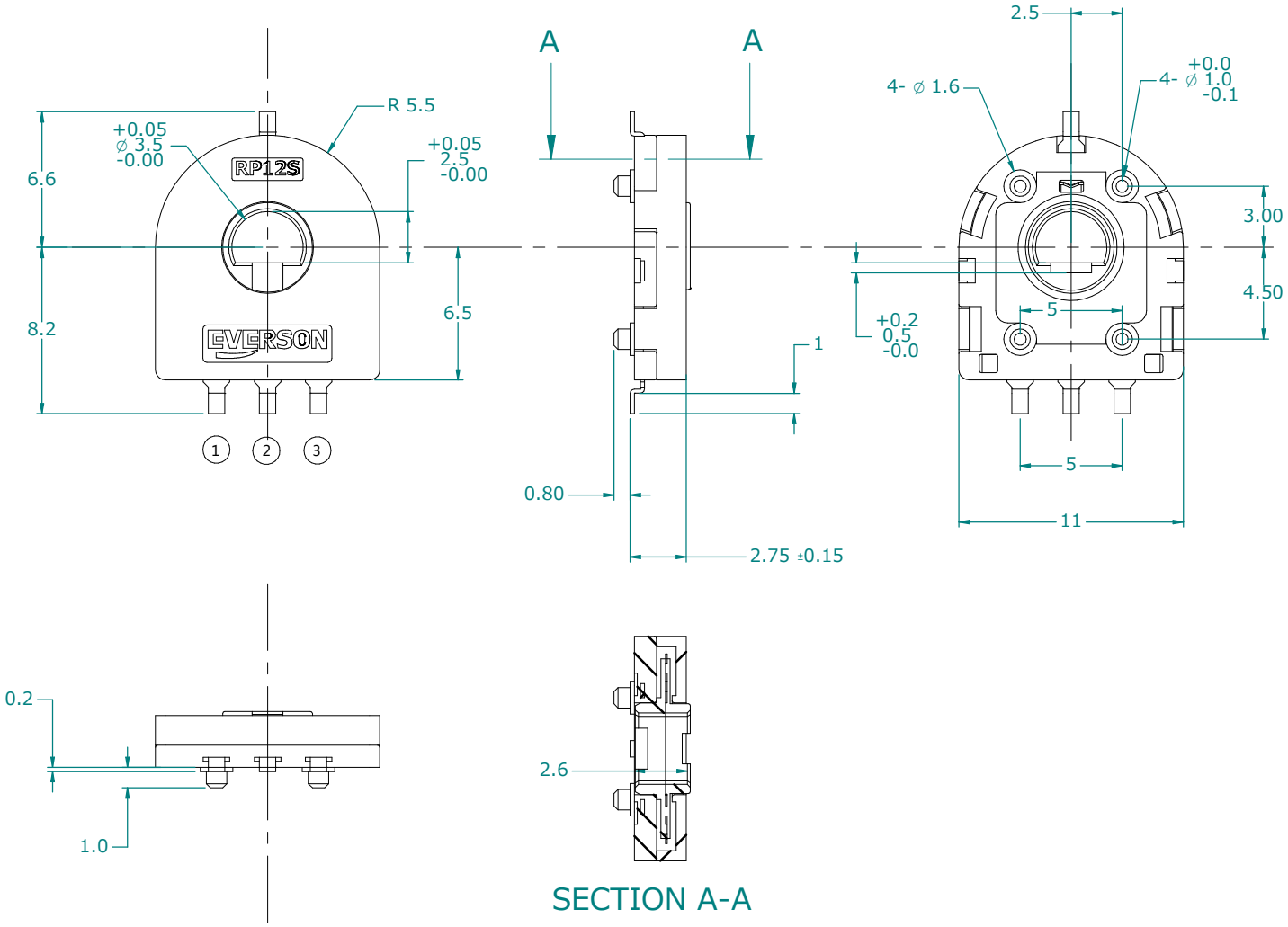
EVERSON TECHNOLOGY LTD

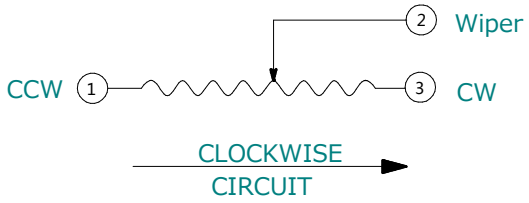
Unit: mm



SECTION A-A

PART SPECIFICATIONS:

1. RESISTANCE: 10K±20%
2. LEHO/HEHO RESIDUAL RESISTANCE: 10 ohms Max.
3. ROTATION ANGLE:
   MECHANICAL : 360°
   ELECTRICAL: 340°
4. NOISE: 200mv Max.
5. POWER RATING: 0.1Watt@75 ℃
6. ROTATIONAL LIFE: 1000K CYCLES
7. SPEC: SEE RP12S-SPEC-001



EVERSON	**EVERSON TECHNOLOGY LTD**			CUSTOMER: GENERAL	
PART NAME: RP12S103BA	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS ANGLES ±1° 0PL 0.5; 1 PL ±0.2; 2 PL ±0.08	SIZE **A4**	SCALE: 3 X	DRAWN BY: ZY.LIANG	CHECKED BY:
PART SERIES: RP12S		REV -		APPROVED BY:	ISSUED DATE :

SPECIFICATION

PRODUCT SERIES	PRODUCT TITLE	SPECIFICATION NO.
RP12S	**ROTARY SENSOR**	**RP12S-SPEC-001**

1 General information

1.1 Working temperature: -30℃ ~120℃

1.2 Storage temperature: -40℃ ~125℃

1.3 Test Conditions:

1.3.1 Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests is as follows:

Temperature: 5~35℃

Relative humidity: 45%~85%RH

Air pressure: 86~106Kpa

1.3.2 If there are any doubtful points in judgment or reproductively is needed, the test conditions shall be in accordance as below.

Temperature: 5~35℃

Relative humidity: 45%~85%RH

Air pressure: 86~106Kpa

2 Appearance and Dimension

2.1 Appearance : No damages in the visual inspection, such as deformation and breaks.

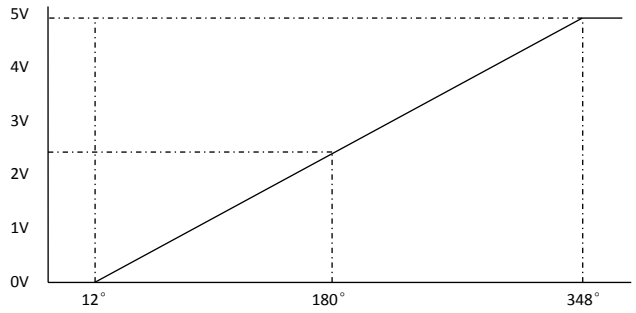
2.2 Dimension: Please view product drawing.

3 Electrical characteristics

3.1 Rated voltage: DC5V±0.5V

3.2 Total resistance: 10KΩ±30%

3.3 Resistance taper: Linearity



PRODUCT SERIES	PRODUCT TITLE	SPECIFICATION NO.
RP12S	ROTARY SENSOR	RP12S-SPEC-001

3.4 Effective electrical angles: 336° ±3°

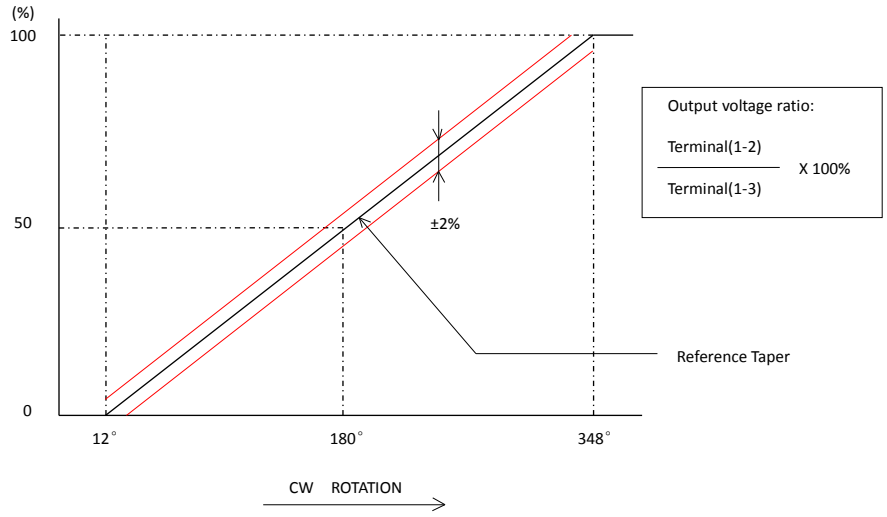
3.5 Power rating: 0.1W

3.6 Rotational noise: 200mv in initial, 500mv after 1000K cycles life test

3.7 Insulation resistance: 100MΩ@500VDC

3.8 Linearity: ±2%

In the range of effective electrical angles. The output deflection of the way is shown by the percentage in assumption of considering the rated voltage applied between terminals 1~3 to be 100%



4 Mechanical characteristics

4.1 Operation torque: 0.005N • m Max.

4.2 Knob push-pull strength: 10N Min.

4.3 Mechanical Angles: 360°

5 Durability

After test, the product shall meet the initial specifications unless otherwise specified.

5.1 Rotational life test:

SPEC: Total resistance value change lower than ±10% Max. after 1,000K life cycles.

PRODUCT SERIES	PRODUCT TITLE	SPECIFICATION NO.
RP12S	ROTARY SENSOR	RP12S-SPEC-001

Test Condition as below:

5.1.1 Test expose temperature: Room temperature.

5.1.2 Test angles: between 12° to 348° .

5.1.3 Test speed: 2000 cycles /H.

5.1.4 Test cycle: 1,000K cycles.

5.1.5 No load test.

5.2 Dry heat test:

SPEC：Resistance value change within ±10%, electrical & mechanical functions meet specs

Test Condition: 96hours at 120±2℃ and air dry 2hours .

5.3 Cold test:

SPEC: Resistance value change within ±10%, electrical & mechanical functions meet specs

Test Condition: 96hours at -30±2℃ and air dry 2hours.

5.4 Humidity test:

SPEC: Resistance value change within ±20%, electrical & mechanical functions meet specs

Test Condition: 96hours at 40±2℃&95%RH and air dry 96hours.

6 Soldering process

6.1 Hand soldering: 350℃±5℃ for 3 seconds Max.

6.2 Reflow soldering: 250℃±3℃ for 5 seconds Max.