

Current Transducer
Applications

NACA.200L-S6/SP1VA

For the electronic measurement of currents: AC, DC, pulsed..., with galvanic separation between the primary circuits and the secondary circuits.

| Advantages | Applications | Standards |
|---|-----------------|------------------------------------|
| Small size and space savings Very good linearity | New energy cars | IEC 60068 ISO 16750 TS 16949 |

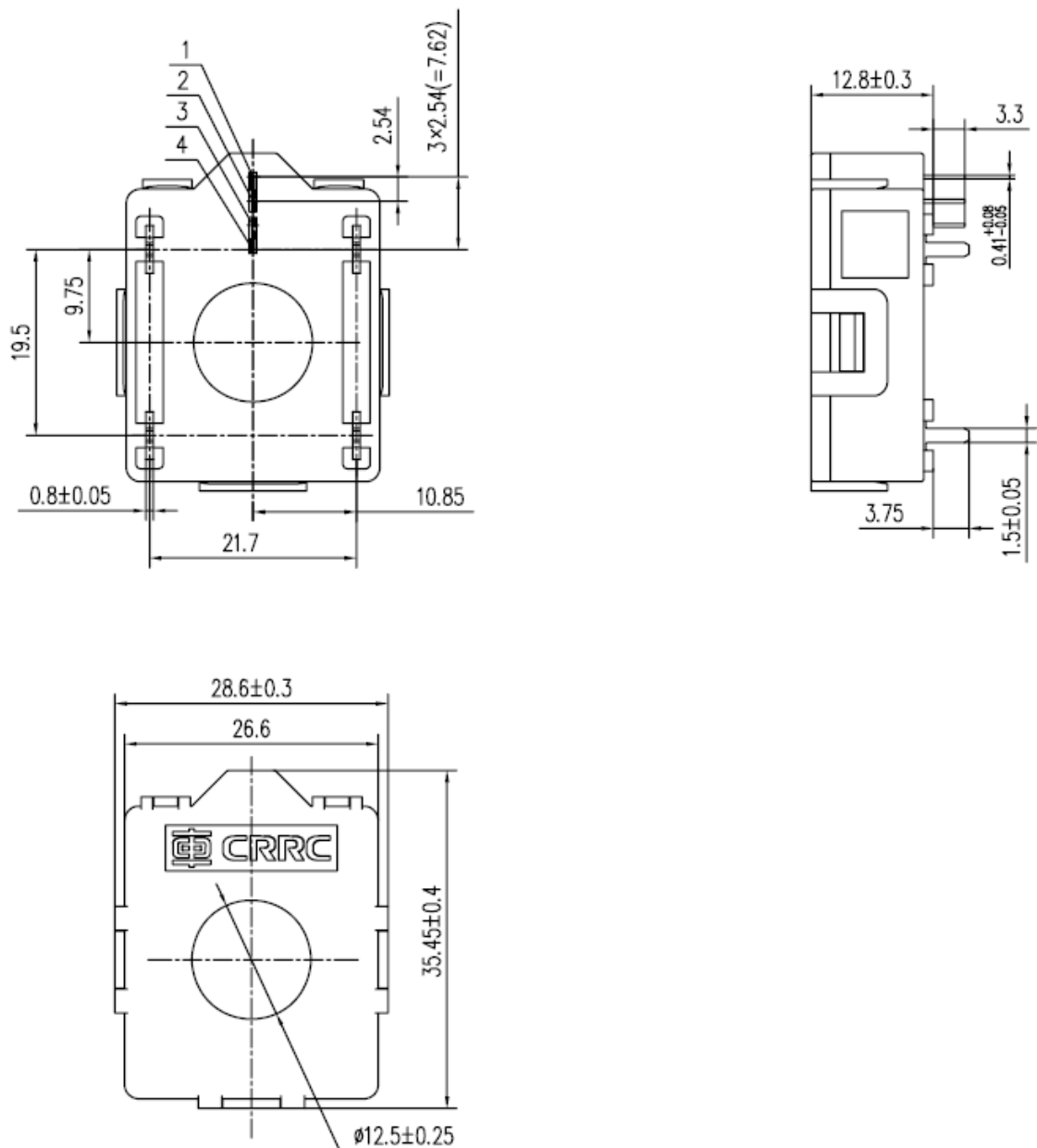
| Main electrical data (@ $\pm I_{PN}$, $R_L = 10\text{ k}\Omega$, $T_A = 25^\circ\text{C}$) | | |
|--|---------------------------------|----------------------------------|
| I_{PN} | Primary nominal current | 200A |
| I_{PM} | Primary current measuring range | $\pm 200\text{A}$ |
| V_C | Supply voltage | $5(1 \pm 5\%) \text{V DC}$ |
| G | Sensitivity | 10mV/A |
| I_C | Current consumption | $\leq 15\text{mA} + V_{OUT}/R_L$ |
| V_{OUT} | Output voltage | $V_C/2 \pm 2\text{V}$ |
| R_{OUT} | Output internal resistance | $\leq 10\Omega$ |
| R_L | Load resistance | $\geq 10\text{k}\Omega$ |
| C_L | Load capacitance | $\leq 4.7\text{nF}$ |

| Accuracy - Dynamic performance data | | |
|---|--|---|
| $\delta_i(I_{PN}, T_A = 25^\circ\text{C})$ | Accuracy(excluding offset) | $\leq \pm 1\%$ of I_{PN} |
| $\delta_L(0 \dots \pm I_{PN})$ | Linearity error | $\leq \pm 0.5\%$ of I_{PN} |
| $\delta_z(T_A = 25^\circ\text{C})$ | Electrical offset voltage | $\leq 2.5\text{V} \pm 15\text{mV}$ |
| δ_{zt} ($T_A = -40^\circ\text{C} \sim +125^\circ\text{C}, V_C = 5\text{V}$) | Temperature coefficient of δ_{zt} | $\leq \pm 0.1\text{mV}/^\circ\text{C}$ |
| ($T_A = -40^\circ\text{C} \sim +125^\circ\text{C}, V_C = 5\text{V}$) | Temperature coefficient of G | $\leq \pm 0.05\%/^\circ\text{C}$ of G |
| $T_R(90\% \text{ of } I_{PN} \& di/dt 100\text{ A}/\mu\text{s})$ | Step response time to 90 % of I_{PN} | $\leq 7\mu\text{s}$ |
| (-3dB)BW | Frequency bandwidth (-3dB) | DC ... 30kHz |

General data

| | | |
|----|-------------------------------|-----------|
| Ta | Ambient operating temperature | -40~+125℃ |
| Ts | Ambient storage temperature | -45~+125℃ |
| m | Mass | ≤30g |

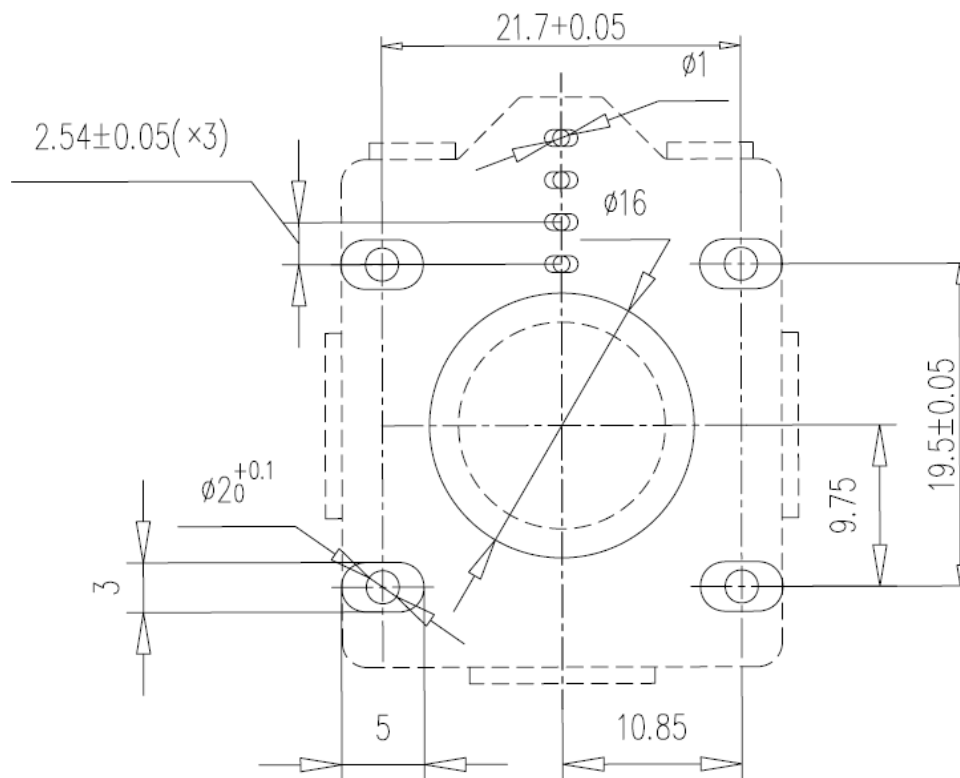
| Insulation coordination | | |
|-------------------------|---|--------|
| | Voltage for AC insulation test, 50Hz,1min | 2.5kV |
| R _{IS} | Isolation resistance | ≥500MΩ |

NACA.200L-S6/SP1VA
Dimensions NACA.200L-S6/SP1VA Series (in mm)


NACA.300L-S6/SP1VA

PCB 1:1

Advisable dimensions Viewed from component side



Connection



Mechanical characteristics

Remark

General tolerance

$\pm 0.5 \text{ mm}$