

产品说明

Applications

NACR.25D-P6/VN 电流传感器适用于对交流、直流、脉冲电流的隔离精确测量，测量时一次侧与二次侧间完全绝缘。

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

产品优点 Advantages	产品应用领域 Applications	参照标准 Standards
<ul style="list-style-type: none"> ● 高精度 Excellent accuracy ● 良好的线性 Very good linearity ● 低温漂 Low temperature drift ● 抗干扰能力强 High immunity to external interference ● 响应时间快，无插入损耗 Optimized response time, no insertion losses 	<ul style="list-style-type: none"> ● 光伏电流检测应用 Photovoltaic (pv) current applications ● AC/DC 变速驱动 AC/DC variable-speed drive ● 开关电源 Switched Mode Power Supplies (SMPS) ● UPS 不间断电源 Uninterruptible Power Supplies (UPS) ● 逆变器上的应用 The applications of inverter 	IEC60950-1:2001 EN50178:1998 SJ20790-2000

主要电气参数 Main electrical data

额定测量电流 I_{PN} (DC)	Primary nominal current	25A
测量范围 I_{PM} (DC)	Primary current measuring range	0~±25A
电源电压 V_C	Supply voltage	DC±5(1±5%)V
电流消耗 I_C	Current consumption	≤15mA
额定测量输出 V_{OUT}	Output voltage	VC/2±2*(IP/IPN)
负载电阻 R_L	Load resistance	2kΩ

精度 - 动态参数 Accuracy - Dynamic performance data

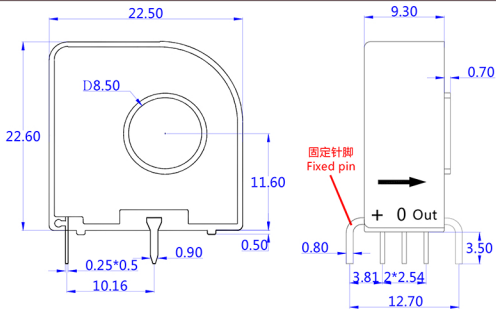
基本误差 X_G ($I_{PN}, T_A=25^\circ C$)	Accuracy(excluding offset)	≤±1%of I_{PN}
线性度 ϵ_L (0 ... ± I_{PM})	Linearity error	≤±1%of I_{PN}
零点输出误差 V_{OE} ($T_A = 25^\circ C$)	Electrical offset voltage	≤±15mV
零点温度漂移 V_{OT} (-40 ~ +85°C)	Temperature variation of V_{OE}	< ±10mV
幅度温度漂移 V_{OS} (-40 ~ +85°C)	Temperature variation of V_O	< ±1.5%
频率带宽 BW	Frequency bandwidth(@-3dB,IPN)	DC-20kHz

一般数据 General data

工作温度 T_a	Ambient operating temperature	-40~+85°C
储存温度 T_s	Ambient storage temperature	-55~+125°C
重量 m	Mass	≤10g
外壳材料	Plastic material	PBT G30/G15, UL94- V0;

绝缘耐压 Insulation coordination

耐压	Voltage for AC insulation test, 50Hz,1min	5kV
绝缘电阻 R_{IS}	Isolation resistance	≥20MΩ



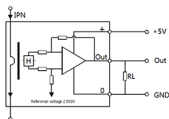
总公差-General tolerance: $\pm 0.2\text{mm}$

初级过孔尺寸 Primary through-hole : $D 8.5 \pm 0.15\text{mm}$

固定引脚尺寸 Fixed pin: $0.8 \times 0.9 \pm 0.15\text{mm}$;

次级引脚尺寸 Secondary pin: 3pin 0.25×0.5

电气连接 Connection



备注 Remark

- 当被测电流通过传感器的初级引脚时，在输出端有对应的电压信号输出。（注意：错误的接线可能损坏传感器）
When the current will be measured goes through the primary pin of a sensor, the voltage will be measured at the output end. (Note: The false wiring may result in the damage the sensor).
- 可以根据客户的要求设计不同额定电流的产品，并且传感器的输出电压时可选择的；
Custom design in the different rated input current and the output voltage are available.
- 母排完全充满孔时，动态性能最佳；
The dynamic performance is the best when the primary hole if fully filled with;

4. 初级导体温度不应超过100°C；

The primary conductor should be <100°C;