

产品特点Products Features

安装方便

Easy mounting

体积小，节省空间

Small size and space saving

无插入损耗

No insertion losses

抗干扰能力强

High immunity to external nterference

应用领域Applications

直流电机驱动静态转换器

Static converters for DC motor drives

通讯电源

Battery supplied applications

不间断电源（UPS）

Uninterruptible Power Supplies

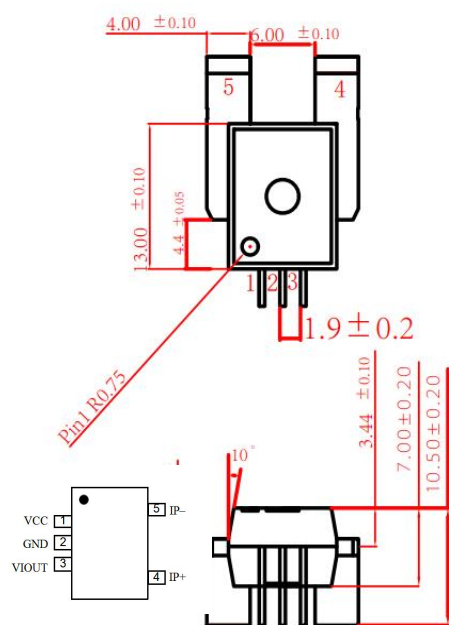
开关电源（SMPS）

SWITCHED Mode Power Supplies

电焊机

Power supplies for welding applications

机械尺寸Mechanical dimension



机械特性

Mechanical characteristics

一般公差

General tolerance

± 0.5 mm

其它公差执行

Other tolerance execution

GB/T 1804-2000-M

固定针尺寸

Fixing hole size

1.5*4mm (×2)

连接器

Connection of secondary

0.38mm×0.51mm (×3)

建议焊接温度

Recommended wave soldering

temperature

265°C±5°C

编号	名称	定义
1	VCC	电源电压
2	GND	信号地
3	VIOUT	模拟信号输出
4	IP+	电流正极
5	IP-	电流负极

注意Remarks

错误的接线可能导致传感器损坏。

The false wiring may result in the damage of the sensor.

Ip方向与产品箭头方向一致时，输出电压为正极。

VOUT is positive when IP flows in the direction of the arrow.

当初级导体完全充满初级孔径时动态表现（di/dt和响应时间）为最佳效果。

Dynamic performances (di/dt and response time) are best with a single bar completely filling the primary hole.

初级导体的温度不应超过100°C。

Temperature of the primary conductor should not exceed 100° C.

电气参数Electrical data

除非另有说明，否则环境参数均为@ $T_A = 25^{\circ}\text{C}$ ， $R_L = 10\text{ k}\Omega$

型号

CI770-XXXXA

Type

额定测量电流 I_P

$\pm 50\text{A}$ $\pm 100\text{A}$ $\pm 150\text{A}$ $\pm 200\text{A}$ $\pm 250\text{A}$ $\pm 300\text{A}$ $\pm 350\text{A}$ $\pm 400\text{A}$

Rated input

测量范围 I_{PM}

$\pm 55\text{A}$ $\pm 110\text{A}$ $\pm 165\text{A}$ $\pm 220\text{A}$ $\pm 275\text{A}$ $\pm 330\text{A}$ $\pm 385\text{A}$ $\pm 400\text{A}$

Measure range

额定输出电压 V_{OUT}

$(V_{CC}/5) \times (2.5 + 2 \times I/I_P)$

Rated output voltage

零点失调电压 V_0

$(V_{CC}/5) \times 2.5V \pm 5mV$

Offset voltage

电源电压 V_C

$+3.3V \sim 5VDC$ ($\pm 5\%$)

Supply voltage

负载电阻 R_M

$\geq 4.7K\Omega$

Load resistance

线性度 ε_L

$\leq 0.5\%FS$

Linearity

总体精度 X

$\pm 1\%FS$

Overall accuracy

零点失调电压温漂 V_{OUT}

$\pm 0.1mV/^{\circ}C$

Offset voltage drift

幅度电压温度漂移 V_{OUT}

$\leq 0.01\%/^{\circ}C$

Amplitude voltage temperature drift

静态电流消耗 I_C

$\leq 10mA$

Current consumption

响应时间 T_R

$< 2.5\mu s$

Response time

频带宽度 BW

$DC \sim 130KHz$

Frequency bandwidth-3db

di/dt 跟随精度

$> 50A/\mu s$

di/dt accurately followed

绝缘耐压 V_D

$50Hz$, $1min$, $4.8KV$

Galvanic isolation

工作环境温度 T_A

$-40 \sim +125^{\circ}C$

Ambient operating temperature

储存环境温度 T_s

$-40 \sim +125^{\circ}C$

Ambient storage temperature

质量 m

$\approx 5g$

Mass