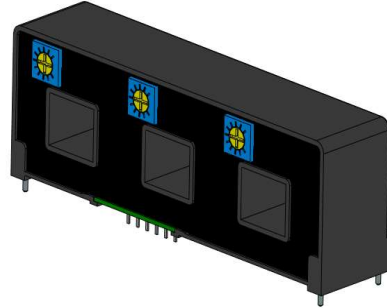


产品规格书	STMHALL	北京世特美测控技术有限公司	
SPECIFICATION		BEIJING STM MEASUREMENT & CONTROL TECHNOLOGY CO.,LTD	
产品名称 Model Name		产品型号 Model Type	
霍尔开环电流传感器		SN3T_C4V6N	
Open Loop Current Transducer using the Hall Effect		Version	D.03



产品描述 Features

霍尔开环电流传感器	Open loop multirange current transducer using the Hall effect
原边副边之间绝缘	With a galvanic isolation between the primary circuit and secondary circuit
用于测量直流、交流、脉冲电流	For the electronic measurement of current DC,AC,pulsed

特性 Advantages

PCB安装	PCB mounting
体积小节约空间	Small size and space savings
无插入损耗	No insertion losses

应用 Applications

伺服电机牵引	Servo motor drives
电焊机,通讯电源	Power supplies for welding,cable TV and telecommunication applications
电池电源	Battery supplied applications
不间断电源	Uninterruptable Power Supplies(UPS)
开关电源 (SMPS)	Switched Mode Power Supplies(SMPS)
焊机电源	Power supplies for welding applications
交流变频调速	AC variable speed drives

型号解释 Model type explanation

S	N3	T	75	C	4	V6	N	
							特殊功能代码 special function code	
						辅助电源代码	power supply code	
					额定输出±4V		rated secondary output voltage is±4V	
				C:电流; V:电压			primary input,C:current; V:voltage	
			额定输入值75A				rated primary input 75A	
		A: AC; D:DC; T:交直流通用					primary input, A:AC; D:DC; T:AC,DC,and pulsed	
		封装外壳代码					housing case code	
S: 电量传感器; T:电量变送器								S: electrical transducer ;T: electrical transmitter with additional funct

环境和结构参数 Environmental and mechanical characteristics

T _A	工作环境温度	Ambient operating temperature	- 10 ... + 75	°C
T _S	存储环境温度	Ambient storage temperature	- 15 ... +85	°C
m	重量	Mass	100±10%	g
	塑件	Material	PA66+GF25%,UL94V0	
	标准	Standards	PrEN 50178:1997	

型号表 Model type table

型号 Model type	原边额定电流 Primary nominal RMS current $I_{PN}(A)$	原边测量电流范围 Primary current, measuring range $I_{PM}(A)$	精度 Accuracy @25°C %FS without offset
SN3T25C4V6N	25	75	2.2
SN3T50C4V6N	50	150	2.2
SN3T75C4V6N	75	225	2.2
SN3T100C4V6N	100	300	2.2
SN3T150C4V6N	150	450	2.2
SN3T200C4V6N	200	450	2.2
SN3T300C4V6N	300	450	2.2

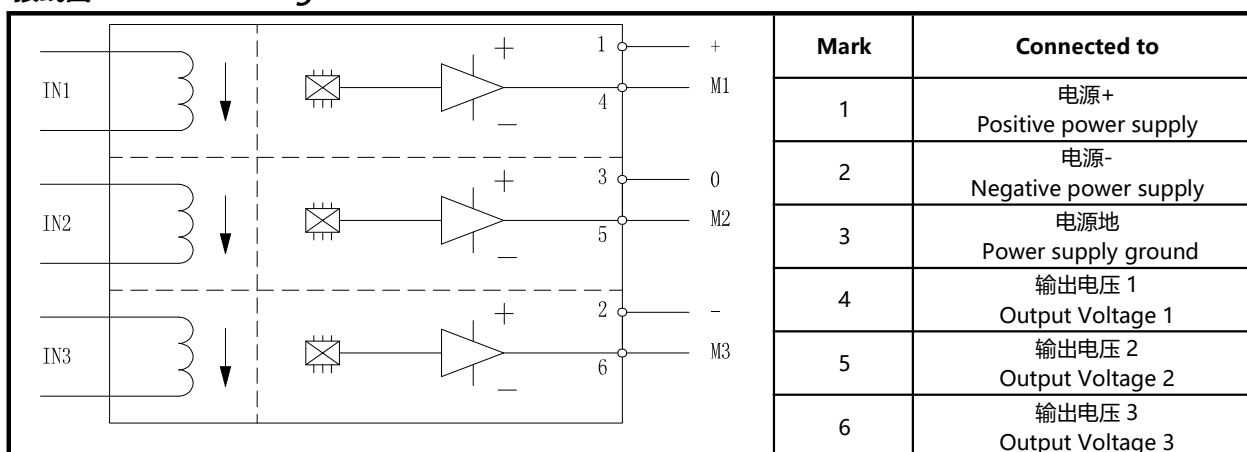
电参数 Electrical data

Symbol	参数	Parameter	Min	Typ	Max	Unit
V_C	辅助电源电压	Supply voltage ($\pm 5\%$)		$\pm 12 \dots \pm 15$		V
I_C	电流消耗	Current consumption, $V_C = \pm 15$			50	mA
V_{OUT}	副边额定输出电压	Secondary nominal voltage @ $R_L = 10k\Omega$		± 4		V
R_{OUT}	输出内电阻	Output internal Resistance		Approx 100		Ω
R_L	负载阻值	Load resistance	10			k Ω
V_d	工频耐压	R.m.s.voltage for AC isolation test 50Hz 1min		2.5		kV

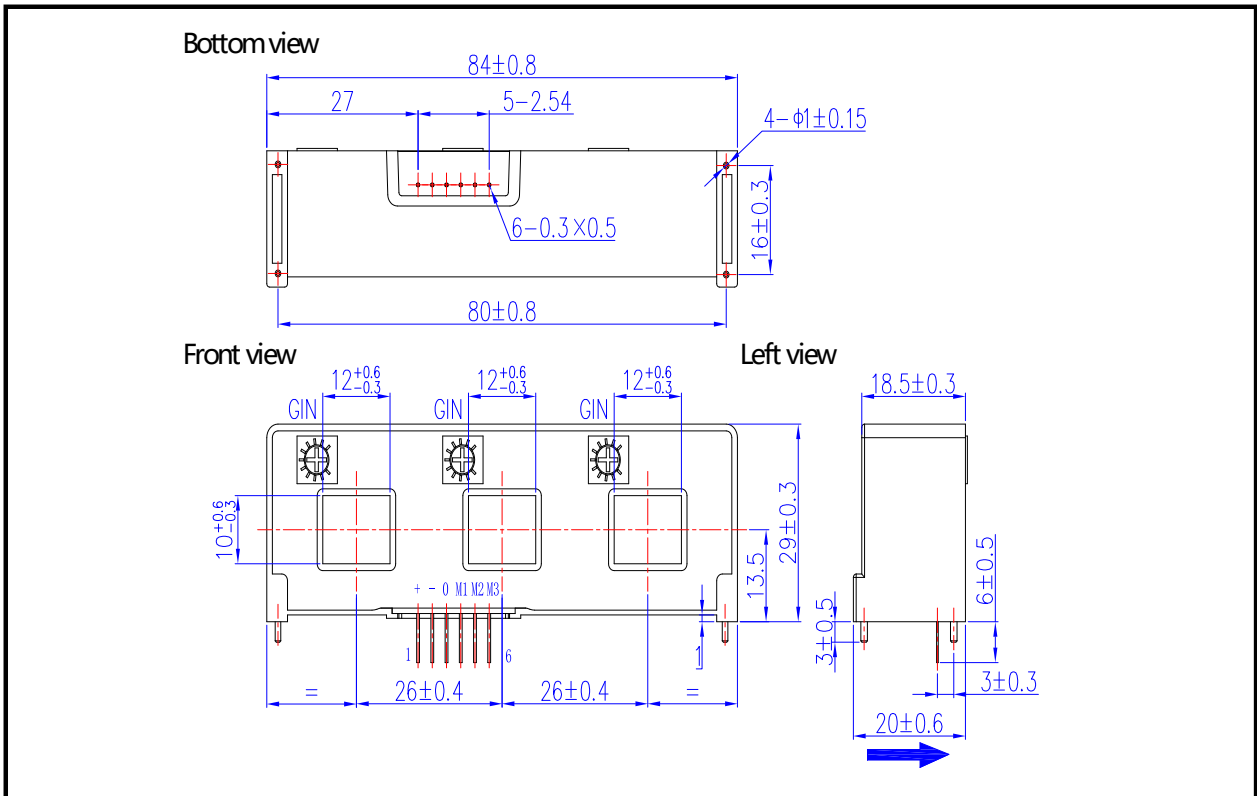
精度—动态参数 Accuracy- Dynamic performance data

Symbol	参数	Parameter	Min	Typ	Max	Unit
V_{OE}	电失调电压	Electrical offset voltage @ $I_P = 0A$, $T_A = 25^\circ C$		± 20	± 40	mV
V_{OM}	磁失调电压	Magnetic offset voltage after an excursion of $3 \times I_{PN}$			± 30	mV
TCV_{OE}	失调电压温漂	Temperature coefficient of V_{out} @ $I_P = 0A$, $-10^\circ C \dots +75^\circ C$			2	mV / $^\circ C$
TCV_{OUT}	输出电压温度特性	Temperature coefficient of V_{OUT}			4	mV / $^\circ C$
T_r	响应时间	Response time to 90% of I_{PN}			10	us
di/dt	di/dt跟随精度	di/dt accurately followed		100		A/us
BW	频带宽度	Frequency bandwidth(-3dB)		DC...10k		Hz
ϵ_L	线性度误差	Linearity error	-1		1	%

接线图 Connection diagram



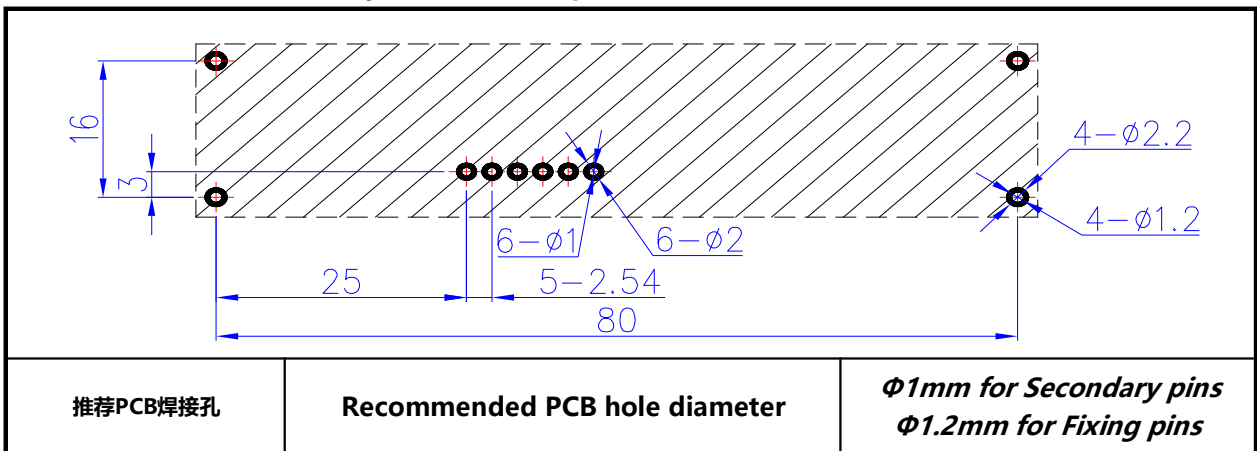
外形图 Mechanical outline (mm)



注1: 当电流 I_p 按箭头方向流过时, V_s 输出为正。

Note1: V_s is positive when I_p flows in the direction of the arrow.

印刷电路板焊接固定 PCB footprint & assembly



STMHALL	公司名称	北京世特美测控技术有限公司
	公司网址	www.bjstmck.com