

MCT-C-25C104 多量程闭环型霍尔电流传感器的初、次级之间是绝缘的，可用于测量直流、交流和脉冲电流。

MCT-C-25C104 multi-range current sensor is a close loop device based on the measuring principle of the hall effect and null balance method, with a galvanic isolation between primary and secondary circuit. It provides accurate electronic measurement of DC, AC or pulsed currents.



电参数 Electrical data(Ta=25℃±5℃)

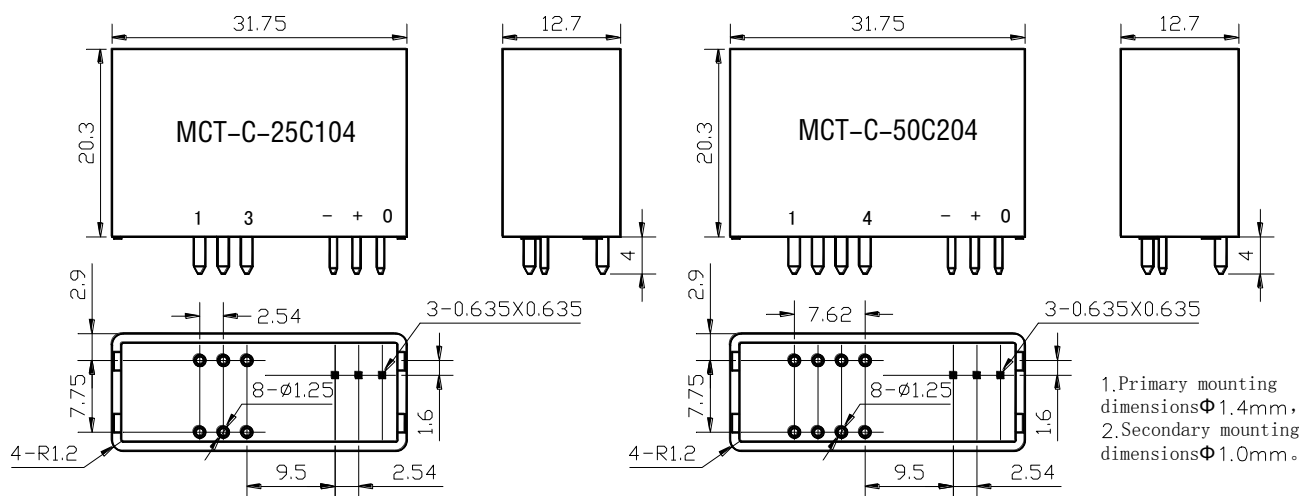
参数 Parameter	型号 Type	MCT-C-25C104	MCT-C-50C204	单位 Unit
额定输入电流 (I _{pn}) Rated input (I _{pn})		25	50	A
测量电流范围 (I _p) Measure range (I _p)		0~±60	0~±120	A
测量电阻范围 Measure resistor range		200~730 (±15V)	54~250 (±15V)	Ω
匝比 (N _p /N _s) Turns ratio (N _p /N _s)		1-2-3:2000	1-2-3-4:2000	
额定输出电流 (I _{sn}) Rated output (I _{sn})		±12.5±0.5%(I _p =±I _{pn})	±25±0.5%(I _p =±I _{pn})	mA
电源电压 Supply voltage		±15±5%		V
功耗电流 Power consumption		20+I _p X(N _p /N _s)		mA
零点失调电流 Zero offset current	@I _p =0	≤±0.2		mA
失调电流温漂 Offset current drift	@ -40℃~+85℃	≤0.5		mA
响应时间 Response time	@50A/μs, 10%-90%	<1		μs
线性度 Linearity	@I _p =0-±I _{pn}	≤0.1		%FS
绝缘电压 Galvanic isolation	@ 50HZ/60HZ, AC, 1min	5		KV
di/dt 跟随精度 di/dt accurately followed		>50		A/μs
带宽(-3dB) Bandwidth(-3dB)		DC...100		KHz
次级线圈电阻 @70℃ Secondary coil resistor		200	180	Ω

应用 Applications

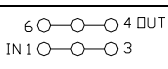
- 变频调速系统 Variable speed drives
- 电焊机 Welding machine
- 通讯电源 Battery supplied applications
- 不间断电源 UPS Uninterruptible Power Supplies (UPS)
- 电化学 Electrochemical

结构参数 Mechanical dimension(for reference only)

1. All dimensions are in mm.
2. General tolerance ± 1 mm.



接线图 Pin connections

初级匝数 Primary turns	额定电流 Rated current IPN (A)	额定输出 Rated output IS (mA)	初级阻抗 Primary resister [m Ω]	初级连接 Pins connections	
				TBC25C104	TBC50C204
1	25, 50	12.5, 25	0.05		
2	12, 24	12, 24	0.20		
3	8, 16	12, 24	0.48		
4	12	24	1.00		

使用说明 Directions for use

1.当待测电流从传感器输入脚流过，即可在输出端测得电流大小。(注意：错误的接线可能导致传感器损坏)

When the current will be measured goes through a sensor, the current will be measured at the output end.

(Note: The false wiring may result in the damage of the sensor)

2.可按用户需求定制不同额定输入电流和输出电压的传感器。

Custom design in the different rated input current and the output voltage are available.

执行标准 Standards

- UL94-V0.
- EN60947-1:2004
- IEC60950-1:2001
- EN50178:1998
- SJ 20790-2000

总体参数 General date

	数值 Value	单位 Unit	符号 Symbol
工作温度 Operating temperature	-40 to +85	°C	TA
储存温度 Storage temperature	-40 to +125	°C	TS
毛重(约) Mass(approx)	15	g	M