

MCT-IA-C06 系列隔离放大器是利用直流调制技术研制而成的新一代隔离放大器，它具有真正三端口隔离的特点，使用十分方便；可用于测量直流、交流和脉冲电压。

MCT-IA-C06 isolated amplifier is a device based on the principle of the DC modulation. Its convenience for the characters of three pin isolated. It provides accurate electronic measurement of DC、AC or pulsed voltage.

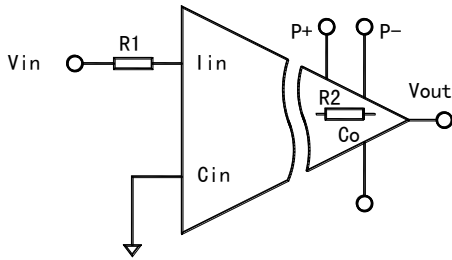


电参数 Electrical data(Ta=25℃±5℃)

型号 Type 参数 Parameter	MCT-IA3505-C06	MCT-IA3515-C06	MCT-IA3524-C06	单位 Unit
电源电压 Supply voltage	5	15	24	V
额定输入电压 (V _{pn}) Rated input (V _{pn})	±5			V
额定输出电压 Rated output	@V _p =±V _{pn}	±5±0.2%		V
输入阻抗 (R _{in}) Input resister (R _{in})	@V _p =±V _{pn}	500±0.1%		KΩ
精度 Precision	±0.5			%
绝缘电压 Galvanic isolation	@ 50HZ, AC, Contious	3.5		KV
失调电压 Offset voltage	@V _{pn} =0	±25		mV
失调电压温漂 Offset drift	@ -40~+85℃	≤±0.3		mV/℃
线性度 Linearity	@ V _p =0-±V _{pn}	≤0.05		%FS
响应时间 Response time	10%-90%	≤1		μs
带宽 (-3db) Band with	DC...200			KHz

应用 Applications

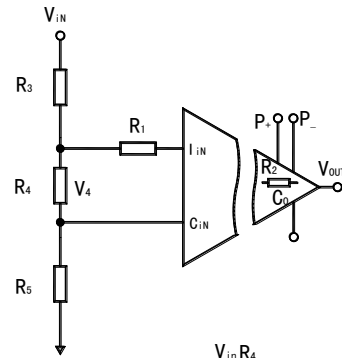
1. $V_{in} < 10V$



$$A_v = \frac{V_{out}}{V_{in}} = \frac{R_2}{R_1}$$

$R_2 = 500K\Omega$,
当 $V_{in} = 75mV$, $R_1 = 7.5 K\Omega$,
 $V_{out} = 5V$; $V_{in} = 5V$, $R_1 = 500 K\Omega$ 。

2. $V_{in} > 10V$

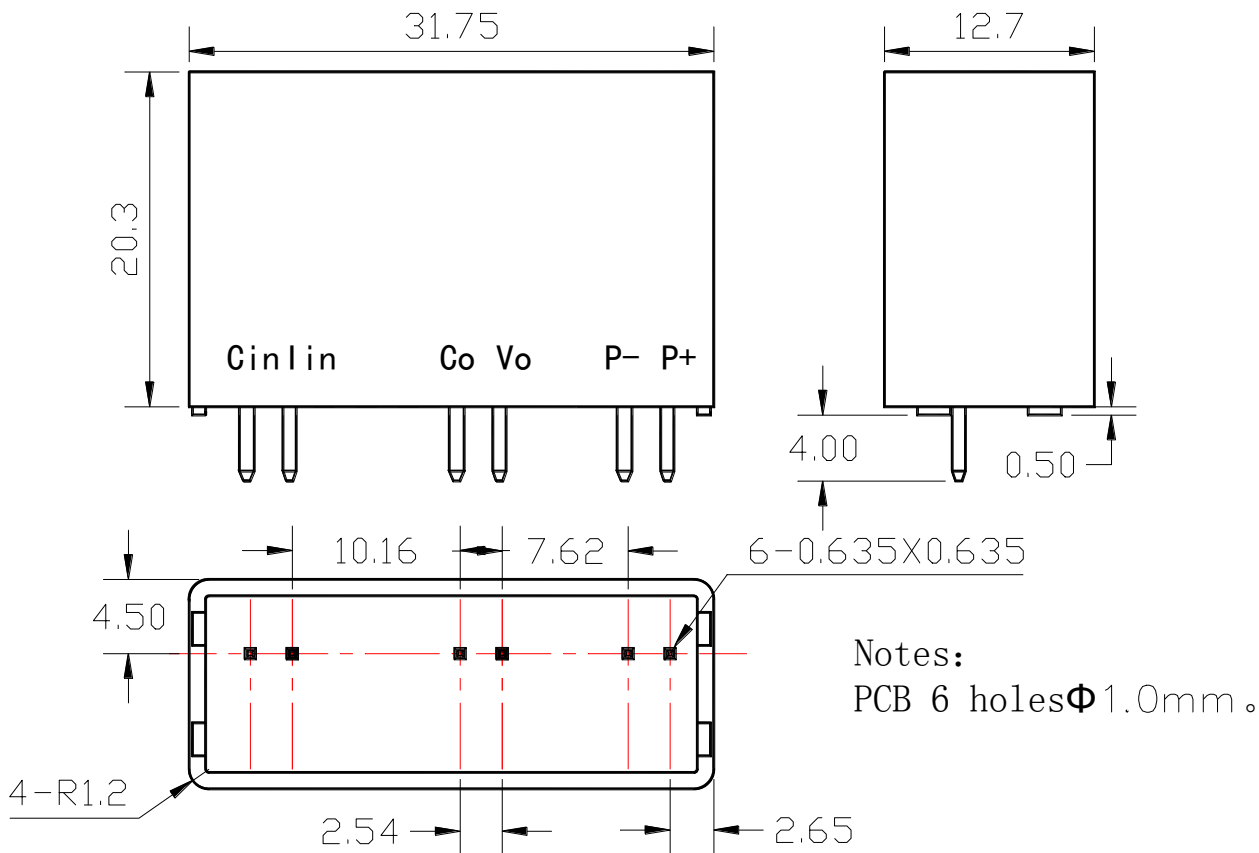


$$V_4 = \frac{V_{in} R_4}{R_3 + R_4 + R_5} = 5V$$

当 $V_{in} = 1000V$,
 $R_3 = R_5 = 1000 K\Omega$, $R_4 = 10 K\Omega$, $R_1 = 500K\Omega$ 。

结构参数 Mechanical dimension(for reference only)

- All dimensions are in mm.
- General tolerance $\pm 1mm$.



执行标准 Standards

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

总体参数 General data

	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)	13	g	M