# MSKSEMI 美森科













**ESD** 

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## MSOP07CDR

产品手册





#### 概述

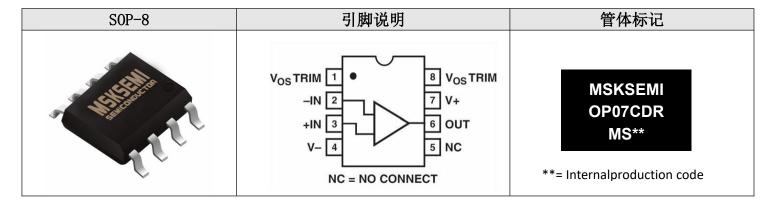
MSOP07CDR 是一个高精密运算放大器,其最大失调电压控制在 150uV。增益达 200V/mV。因MSOP07CD特别适合用于仪表等方面。

MSOP07CDR 有着较宽的输入电压范围(±13V),以及高达 100dB 以上的共模抑制比(CMRR),其在高闭环增益电路中亦保持出色的线性度和增益精度。

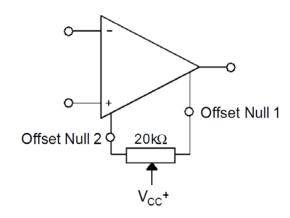
## 主要特点

- 最大失调电压. 150uV MAX
- 低失调电流 Iio=1.3nA typ
- 工作电压范围宽 ±3Vto±20V

#### 引脚描述和标记

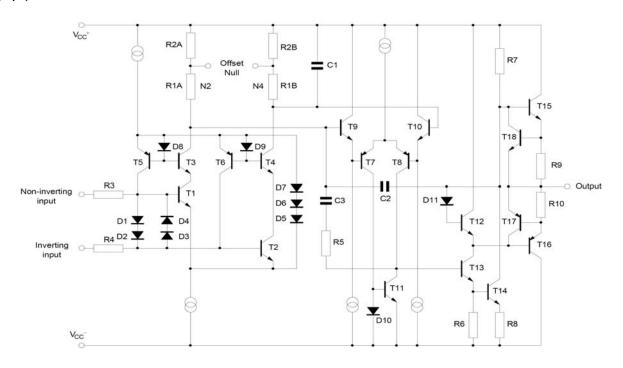


## 输入失调调零电路





## 框图



## 极限参数 (绝对最大额定值, 若无其它规定, Tamb=25℃)

参数名称	符号	数值	单位
电源电压	Vcc	±20	V
输入电压	Vi	±18	V
输入差动电压	Vid	±30	V
工作温度	Topr	-10 <sup>~</sup> +85	$^{\circ}$
贮存温度	Тѕтс	-40 <sup>~</sup> +150	$^{\circ}$

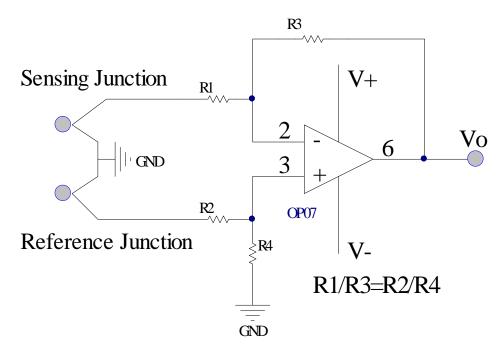
## **电特性**(Vcc=±15V, Tamp=25℃ 特殊情况另外说明)

** 11	描 述	数值			単位
符号	<b>为</b>		典型值	最大值	半世
Vio	失调电压			150	uV
V10	0°C <tamb<70°c< td=""><td></td><td></td><td>250</td><td>uV</td></tamb<70°c<>			250	uV
DVio	失调温度漂移			1.8	uV/℃
Iio	输入失调电流			8	nA
Iib	输入偏置电流			28	nA
Vicm	输入共模电压	±13	⊥19 E		V
VICIII	0°C <tamb<70°c< td=""><td>±13</td><td><math>\pm 13.5</math></td><td></td></tamb<70°c<>	±13	$\pm 13.5$		
CMR	共模抑制比	100			dB
SVR	电源抑制比	90			dB
Avd	Large Signal Voltage Gain VCC = $\pm 15$ V, RL= $2$ k $\Omega$ , V0= $\pm 10$ V,	100			V/mV

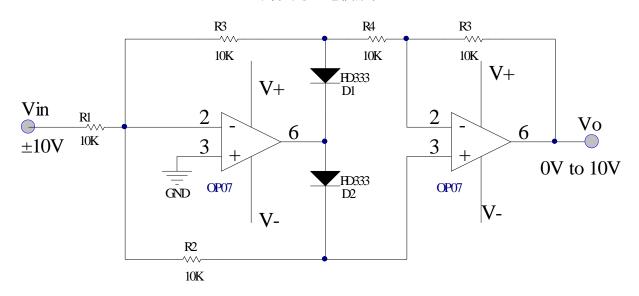


Vopp	输出峰值 RL = 10kΩ RL = 2kΩ	±12 ±11.5			V
GBP	增益带宽 RL = 2kΩ, CL= 100pF, f = 100KHz)		0. 5		MHz
ICC	电源电流(no load) 0℃ 〈Tamb 〈70℃ VCC = ±3V		3.8	6 7 3	mA

## 典型应用图



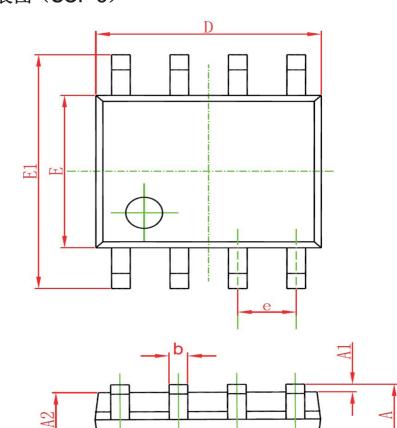
高稳定热电偶放大

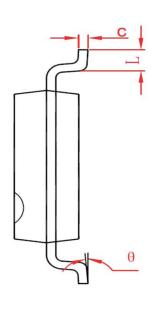


精密绝对值电路



## 封装图 (SOP-8)





<i>'th'</i> ; □.	毫米(mm)		英寸(Inch)		
符号	最小值	最大值	最小值	最大值	
Α	1.350	1.750	0.053	0.069	
A1	0.100	0.250	0.004	0.010	
A2	1.350	1.550	1.550	0.061	
b	0.330	0.510	0.013	0.020	
С	0.170	0.250	0.006	0.010	
D	4.700	5.100	0.185	0.200	
E	3.800	4.000	0.150	0.157	
E1	5.800	6.200	0.228	0.244	
е	1.27(BSC)		0.050(BSC)		
L	0.400	1.270	0.016	0.050	

## 订货信息

料号	封装	包装
MSOP07CDR	SOP8	2500PCS



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