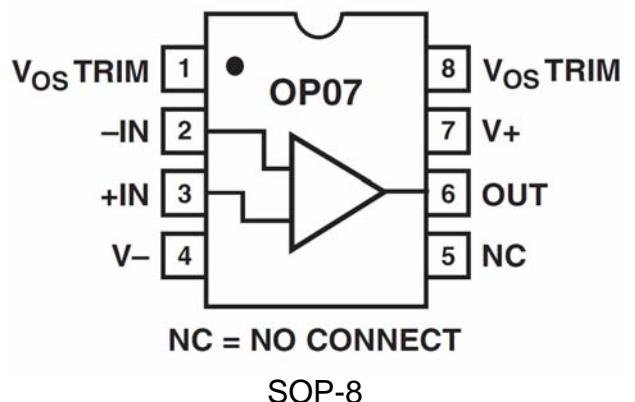


## Summary

OP07C is a high precision operational amplifier, and its maximum offset voltage is controlled at 150uV. The gain reaches 200V/mV. Therefore, OP07C is especially suitable for instruments and other aspects.

OP07C has a wide input voltage range. ( $\pm 13V$ ), and the common mode rejection ratio (CMRR) of more than 100DB, which also maintains excellent linearity and gain accuracy in high closed-loop gain circuits.

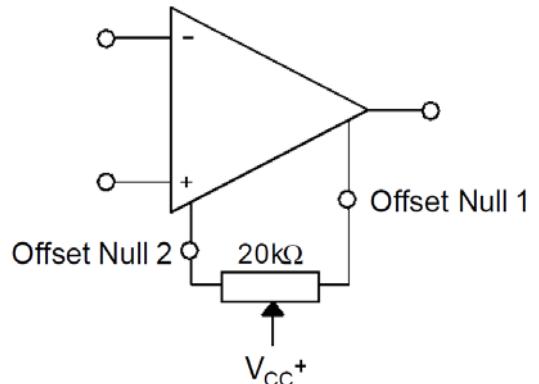
## Pin information



## Main feature

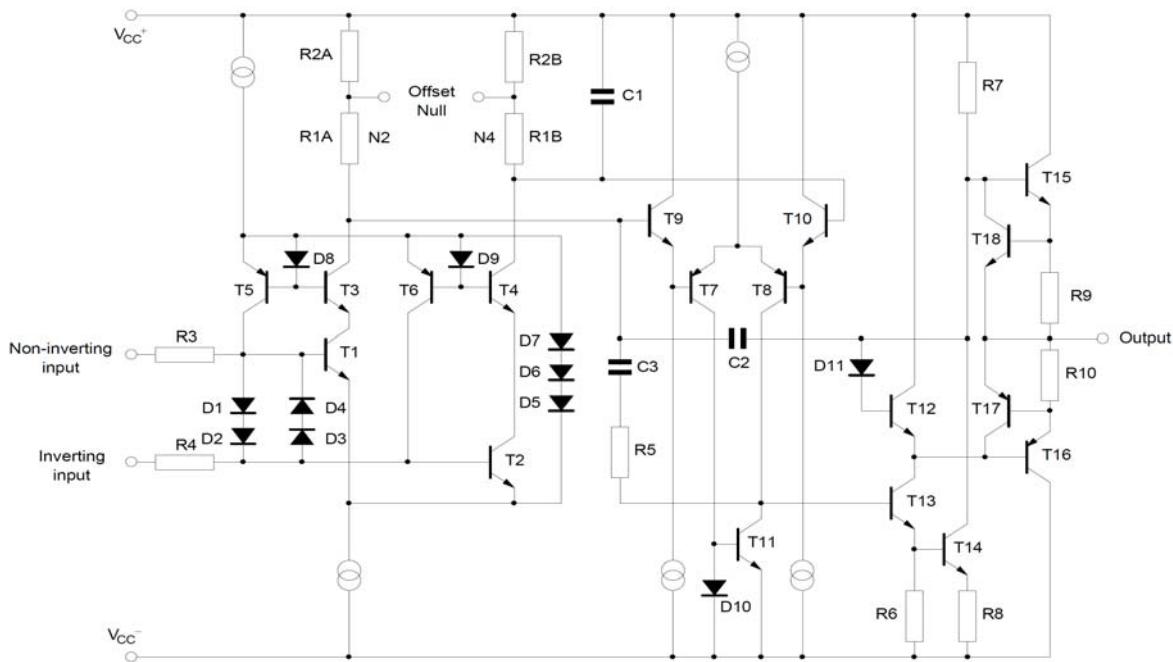
- Maximum offset voltage 150uV MAX
- Low offset current  $I_{O} = 1.3nA$  typ
- The working voltage range is  $\pm 3V$  to  $\pm 20V$ .

## Input offset zeroing circuit



## Block graph

## Low offset single operational amplifier



Limit parameter (absolute maximum rating, unless otherwise specified, Tamb=25°C)

Parameter name	symbol	numerical value	unit
Power supply voltage	Vcc	±20	V
input voltage	Vi	±18	V
Input differential voltage	Vid	±30	V
Working temperature	TOPR	-10~+85	°C
storage temperature	TSTG	-40~+150	°C

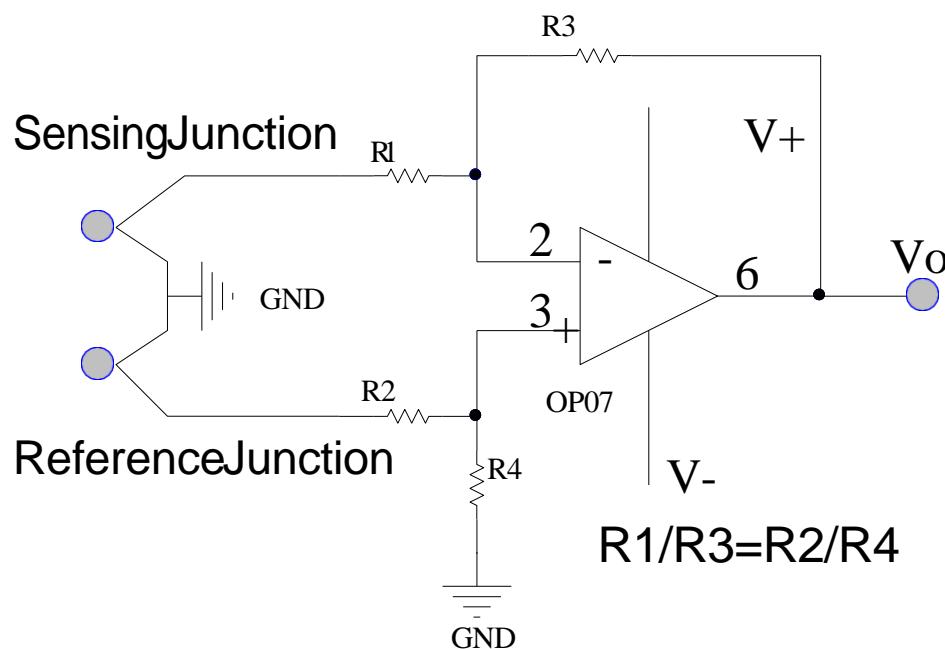
Electrical characteristics (VCC = 15V, Tamp = 25°C shall be specified separately)

symbol	describe	numerical value			unit
		minimum value	typical value	maximum	
Vio	offset voltage 0°C<Tamb<70°C			150 250	uV uV
DVio	Offset temperature drift			1.8	uV/°C
lio	Input offset current			8	nA
lib	Input bias current			28	nA
Vicm	Input common-mode voltage 0°C<Tamb<70°C	±13 ±13	±13.5		V
CMR	common mode rejection ratio	100			dB
SVR	Power supply rejection ratio	90			dB
Avd	Large Signal Voltage Gain VCC=±15V, RL=2kΩ, VO=±10V,	100			V/mV

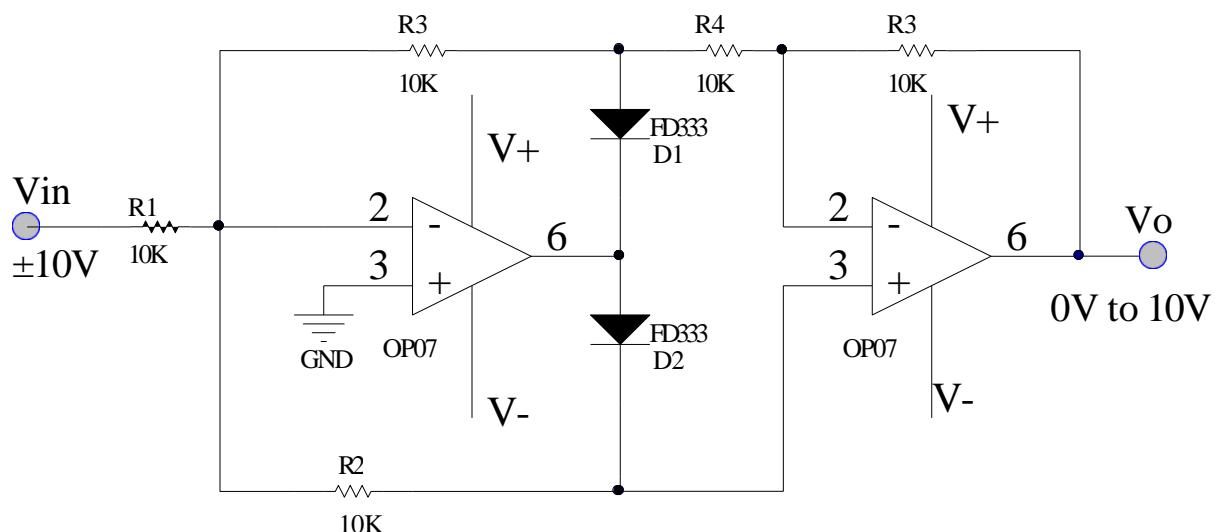
**Low offset single operational amplifier**

V <sub>opp</sub>	Output RL = 10kΩ RL = 2kΩ	±12 ±11.5			V
GBP	Gain bandwidth RL = 2kΩ, CL = 100pF, f = 100KHz)		0.5		MHz
ICC	Powersupplycurrent(noload) 0°C < Tamb < 70°C VCC = ± 3V		3.8 1	6 7 3	mA

**Typical application diagram**



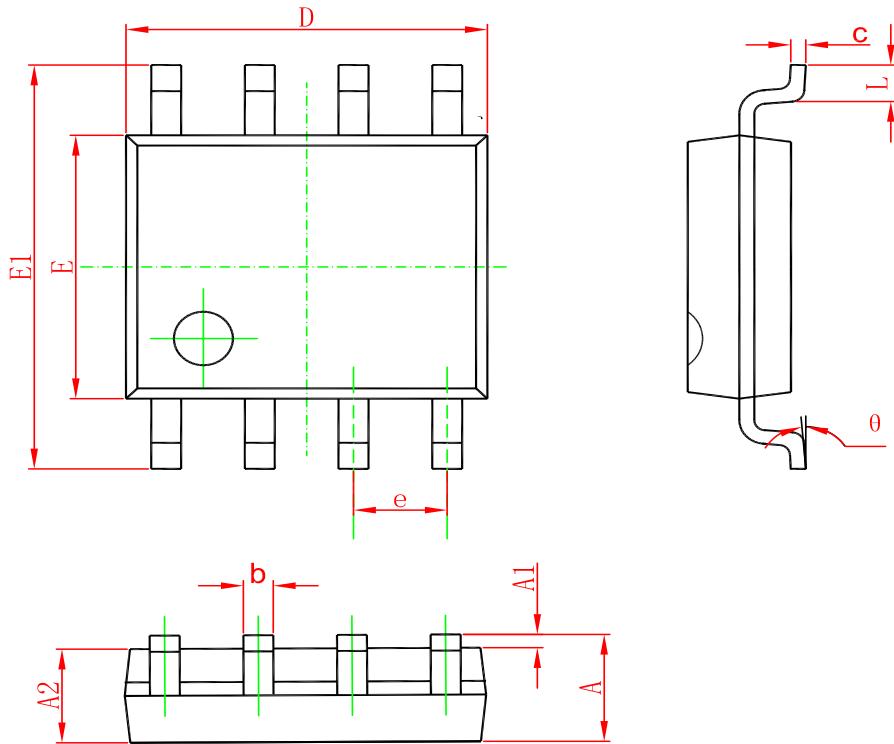
**High stability thermocouple amplification**



**Precision absolute value circuit**

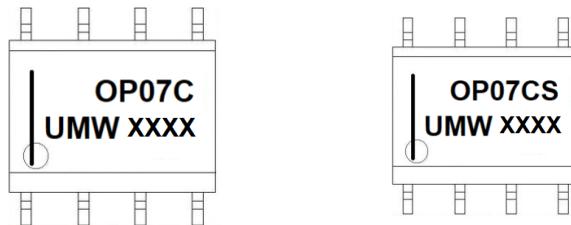
## PACKAGE OUTLINE DIMENSIONS

SOP-8



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.350	1.750	0.053	0.069
A1	0.100	0.250	0.004	0.010
A2	1.350	1.550	0.053	0.061
b	0.330	0.510	0.013	0.020
c	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
e	1.270(BSC)		0.050(BSC)	
L	0.400	1.270	0.016	0.050
θ	0°	8°	0°	8°

## Marking



## Ordering information

Order code	Package	Baseqty	Deliverymode
UMW OP07CDR	SOP-8	2500	Tape and reel
UMW OP07CSZ	SOP-8	2500	Tape and reel

单击下面可查看定价，库存，交付和生命周期等信息

[>>UMW\(友台半导体\)](#)