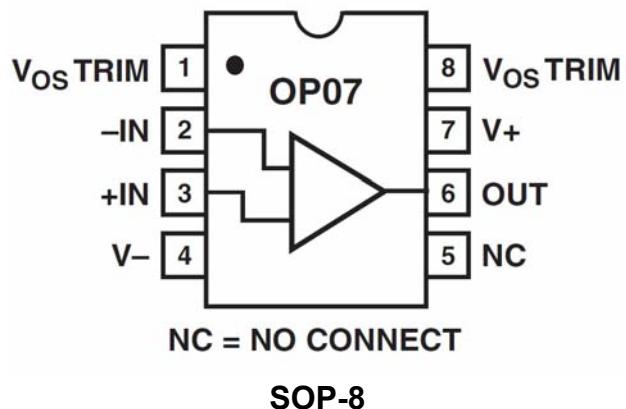


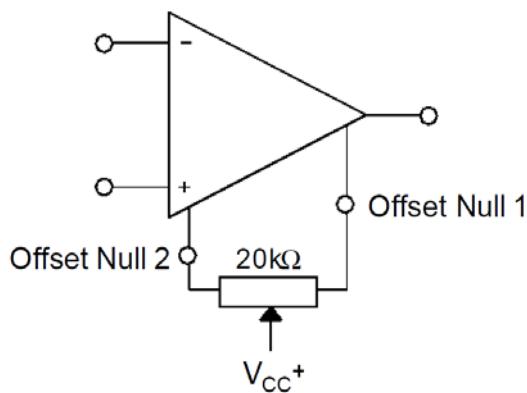
1. Description

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.

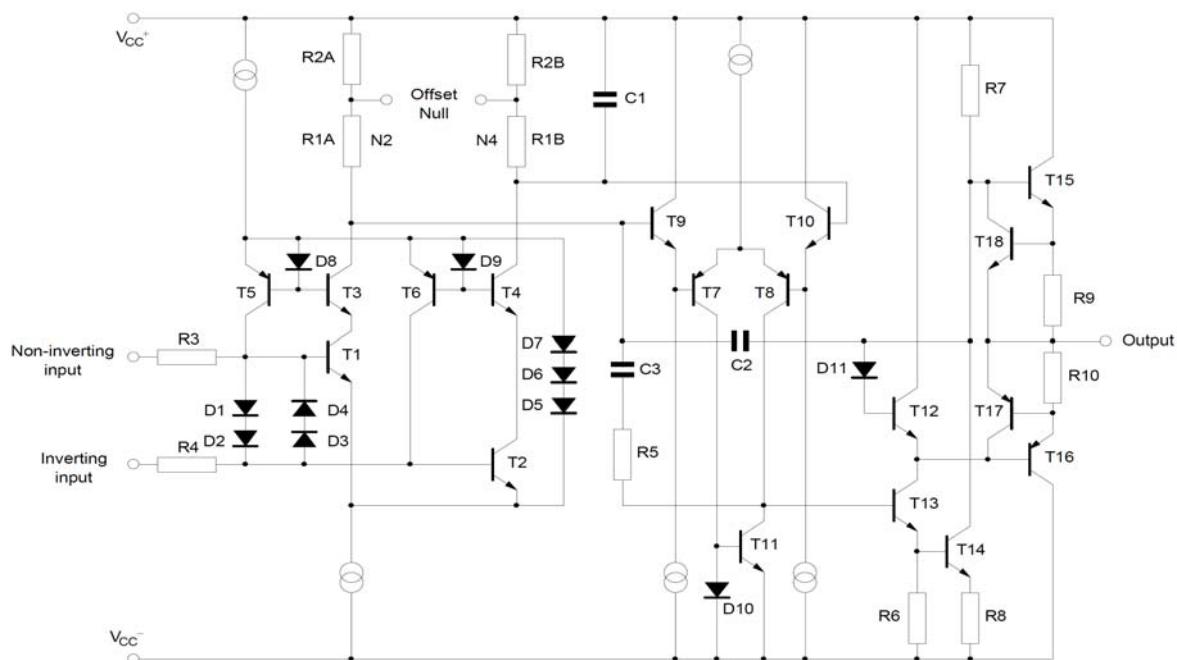
3. Pin information



4. Input offset zeroing circuit



5. Block graph





6. Limit parameter

Parameter Name	Symbol	Numerical Value	Unit
Power supply voltage	V_{CC}	± 20	V
input voltage	V_i	± 18	V
Input differential voltage	V_{id}	± 30	V
Working temperature	T_{OPR}	-10 to +85	°C
storage temperature	T_{STG}	-40 to +150	°C

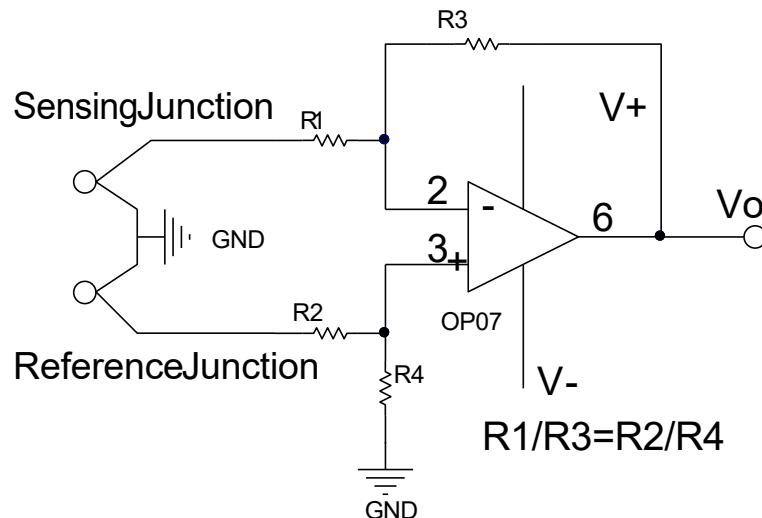


7. Electrical characteristics

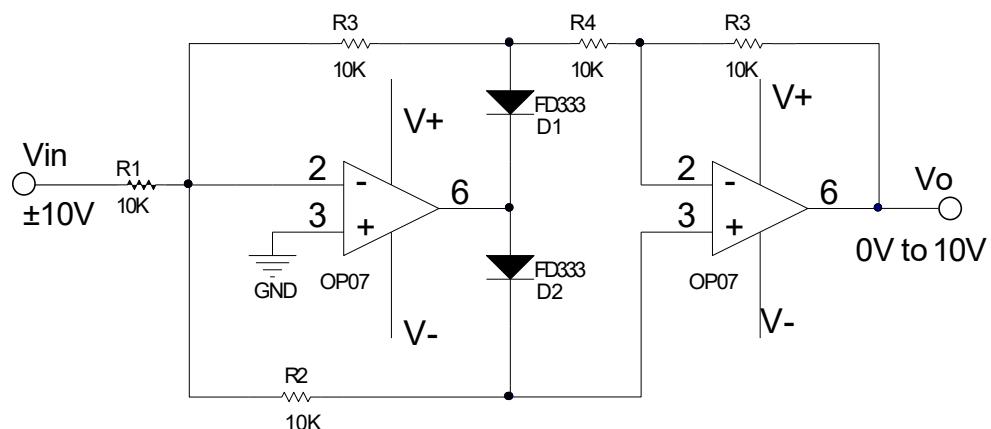
($V_{CC}=15V$, $T_{amp}=25^{\circ}C$ shall be specified separately)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Offset Voltage	V_{OS}				150	μV
		$0^{\circ}C < T_{amb} < 70^{\circ}C$			250	μV
Offset Temperature Drift	dV_{OS}/dT				1.8	$\mu V/{}^{\circ}C$
Input Offset Current	I_{OS}				8	nA
Input Bias Current	I_b				28	nA
Input Common-Mode Voltage	V_{CM}	$0^{\circ}C < T_{amb} < 70^{\circ}C$	± 13	± 13.5		V
Common Mode Rejection Ratio	CMRR		100			dB
Power Supply Rejection Ratio	SVR		90			dB
Large Signal Voltage Gain	Avd	$V_{CC}=\pm 15V, R_L=2k\Omega, V_O=\pm 10V$	100			V/mV
Peak Output	V_{OPP}	$R_L=10k\Omega$	± 12			V
		$R_L=2k\Omega$	± 11.5			V
Gain Band Width	GBP	$R_L=2k\Omega, C_L=100pF, f=100KHz$		0.5		MHz
Power Supply Current (NoLoad)	I_{CC}	$I_{OUT}=0A$		3.8	6	mA
		$0^{\circ}C < T_{amb} < 70^{\circ}C$			7	mA
		$V_{CC}=\pm 3V$		1	3	mA

8.Typical application diagram

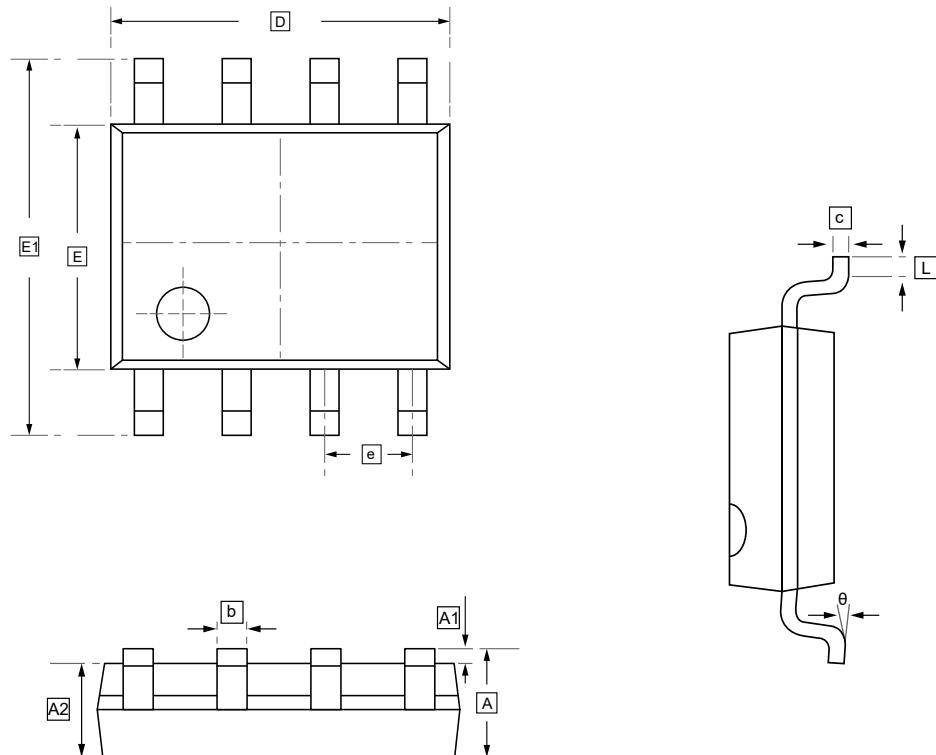


High stability thermocouple amplification



Precision absolute value circuit

9. SOP-8 Package Outline Dimensions

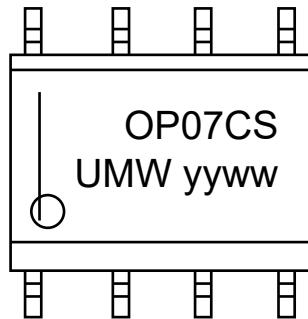
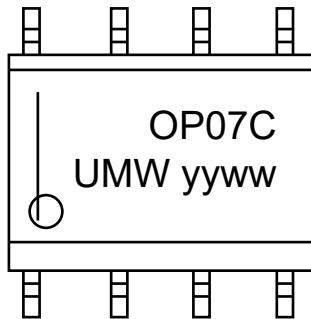


DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	A2	b	c	D	E	E1	e	L	θ
Min	1.350	0.000	1.350	0.330	0.170	4.700	3.800	5.800	1.270	0.400	0°
Max	1.750	0.100	1.550	0.510	0.250	5.100	4.000	6.200	BSC	1.270	8°



10. Ordering information



yy: Year Code
ww: Week Code

Order Code	Package	Base QTY	Delivery Mode
UMW OP07CDR	SOP-8	2500	Tape and reel
UMW OP07CSZ	SOP-8	2500	Tape and reel



11.Disclaimer

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