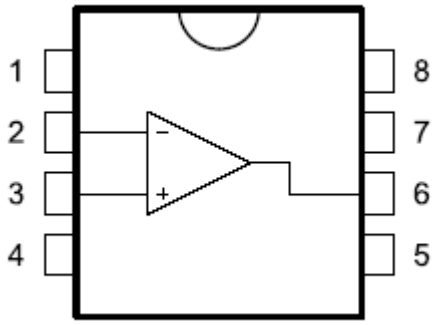
GENERAL PURPOSE SINGLE OPERATIONAL AMPLIFIER

FEATURES

- Large input voltage range
- No latch-up
- High gain
- Short-circuit protection
- No frequency compensation

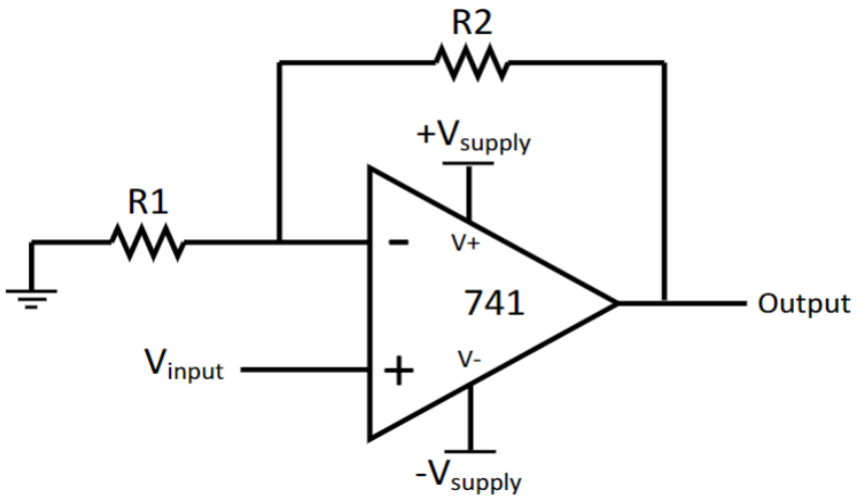
PIN CONNECTIONS



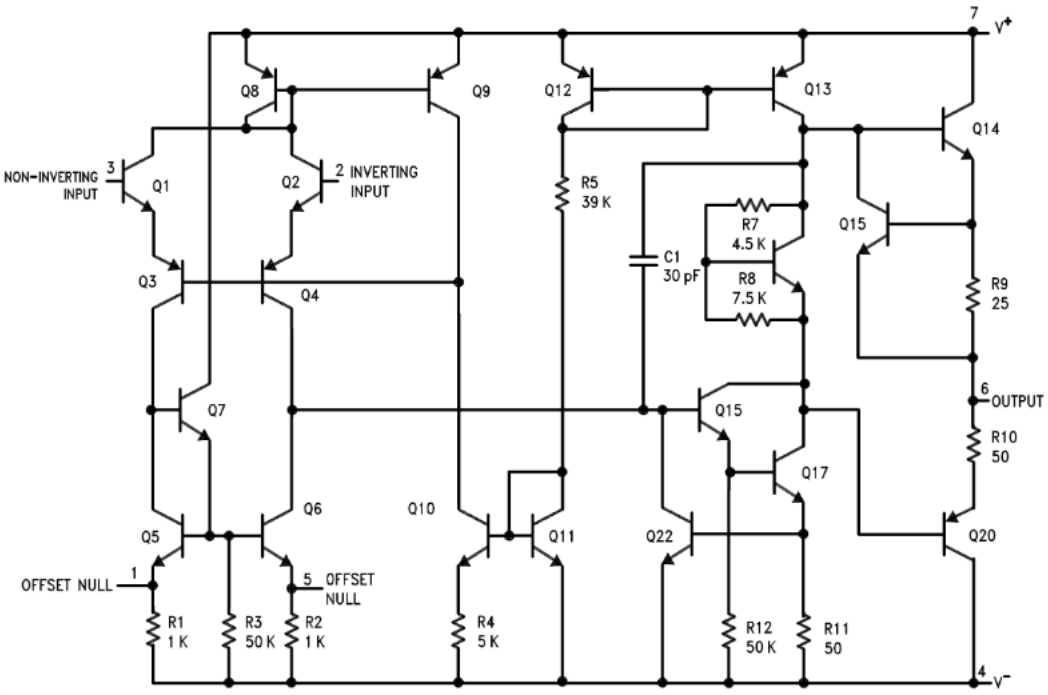
PIN LOCATION AND FUNCTIONAL PURPOSE

PIN		I/O	DESCRIPTION
NAME	NO.		
INVERTING INPUT	2	I	Inverting signal input
NC	8	N/A	No Connect, should be left floating
NONINVERTING INPUT	3	I	Noninverting signal input
OFFSET NULL	1, 5	I	Offset null pin used to eliminate the offset voltage and balance the input voltages.
OFFSET NULL			
OUTPUT	6	O	Amplified signal output
V+	7	I	Positive supply voltage
V–	4	I	Negative supply voltage

Typical Application



Functional Block Diagram



ELECTRICAL CHARACTERISTICS

Electrical characteristics at V_{cc} = ±15 V, T_{amb} = 25°C (unless otherwise specified)

Parameter, unit	Symbol	$T_{min} \le T_{amb} \le T_{max}$ (0°C) (70°C)		T_{amb} = (25±5)°C	
		min	max	min	max
1. Input offset voltage, mV	U_{IO}	–6,0	6,0	–5,0	5,0
2. Input current, nA	I_I	–200,0	200	–100,0	100,0
3. Input offset current, nA	I_{IO}	–70,0	70,00	–30,0	30,0
4. Large signal voltage gain, V/mV (R_L = 2 kΩ)	Au	25	–	50	–
5. Supply voltage rejection ratio, dB	K_{SVR}	77	–	77	–
6. Supply current, no load, mA	I_{CC} (I_{CC1} I_{CC2})	–	3,3	–	2,8
7. Input common mode voltage range, V	U_{IC} max	12	–12	12	–12
8. Common mode rejection ratio, dB	K CMR	70	–	70	–
9. Output voltage swing, V R_L = 10 kΩ R_L = 2 kΩ	Uo max	 12 10	 –12 –10	 12 10	 –12 –10
10. utput short-circuit current, mA	I_{OS} [1)]	–	–	10	–
11. Slew rate, V/μs R_L=2 kΩ, C_L=100 pF, U_I±10 V	S_{VOM} [1)]	–	–	0,25	–
12. ain bandwidth product, MHz U_I = 10 mV, R_L = 2 kΩ, C_L = 100 pF, f = 100 kHz	f1[1)]	–	–	0,7	–
13. Input resistance, MΩ	R_I [1)]	–	–	0,3	–

[1)] Parameter is gauranted

MAXIMUM AND ABSOLUTE MAXIMUM RATINGS

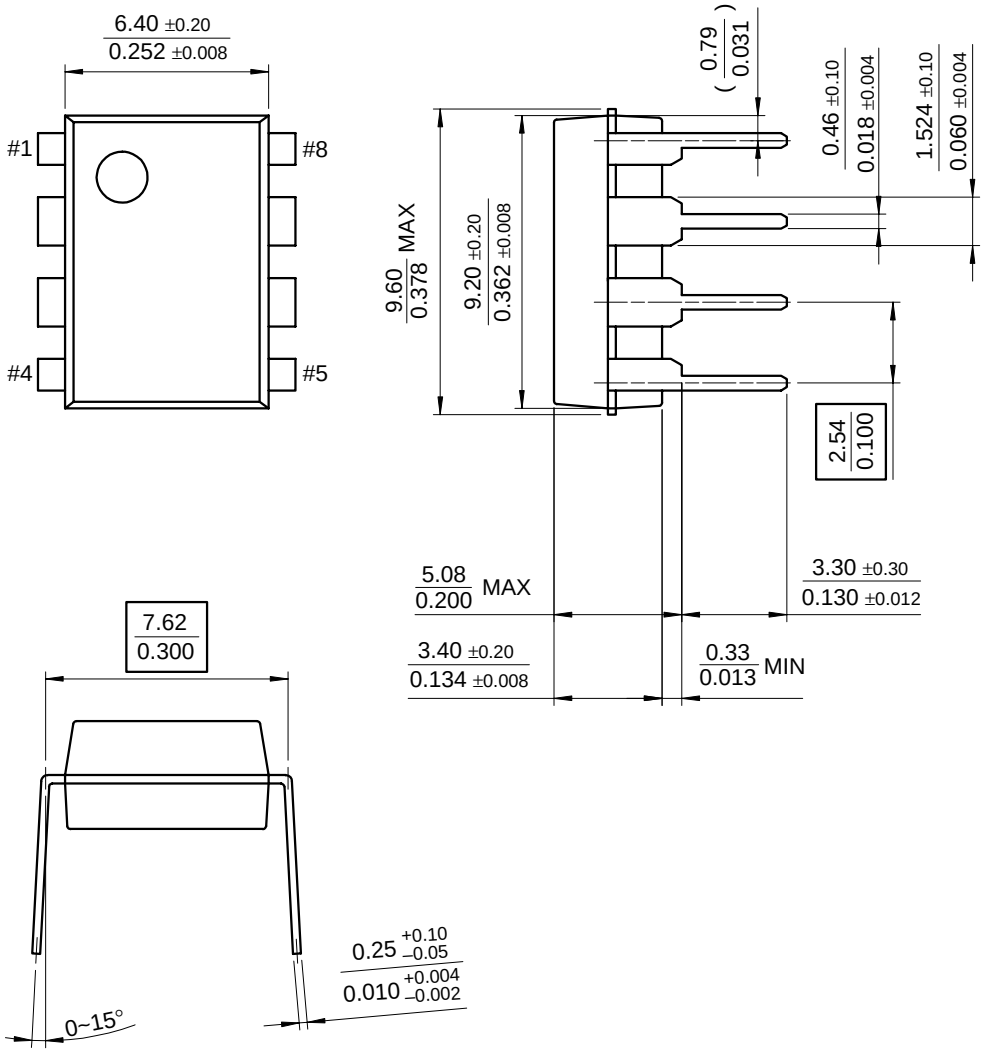
Parameter, unit	Symbol	Maximum ratings		Absolute maximum ratings	
		min	max	min	max
Supply voltage, V	Ucc	± 5	± 18	± 4.5	± 20
Common mode input voltage range, V	U_{ICM}	–	± 12	–	± 15

Mechanical Dimensions

Package

Dimensions in millimeters

8-DIP



Mechanical Dimensions (Continued)

Package

Dimensions in millimeters

8-SOP