

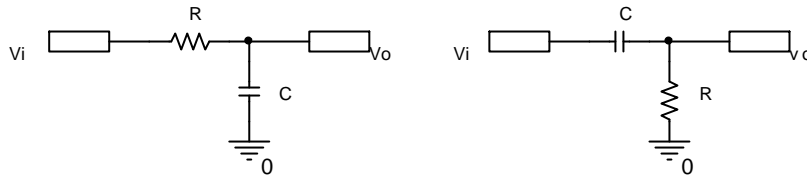
2000 1

II

(1)

Unit step response 가

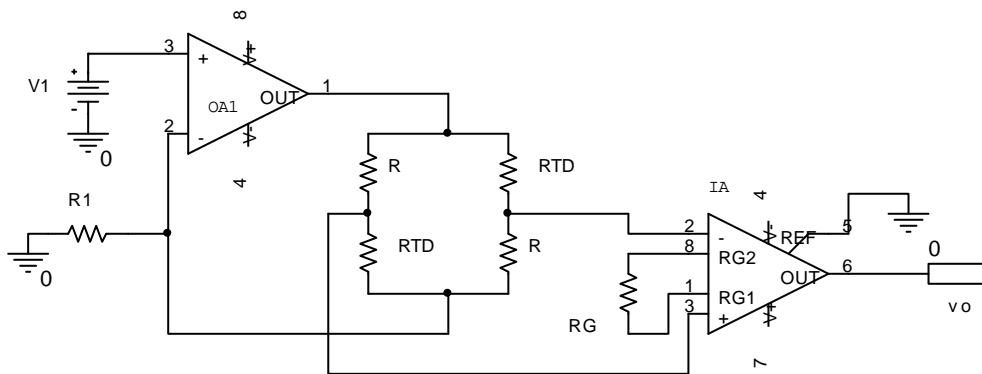
,  $R = 1592\Omega$ ,  $C = 1\mu F$  ,  $0V$



(a) (b)

(2) RTD  $a = 0.00392/^{\circ}C$  ,  $T = 0^{\circ}C$  , RTD  
 100Ω . Self-heating RTD 0.2mW  
 0.1V/°C  
 가 . Op amp OA1 IA

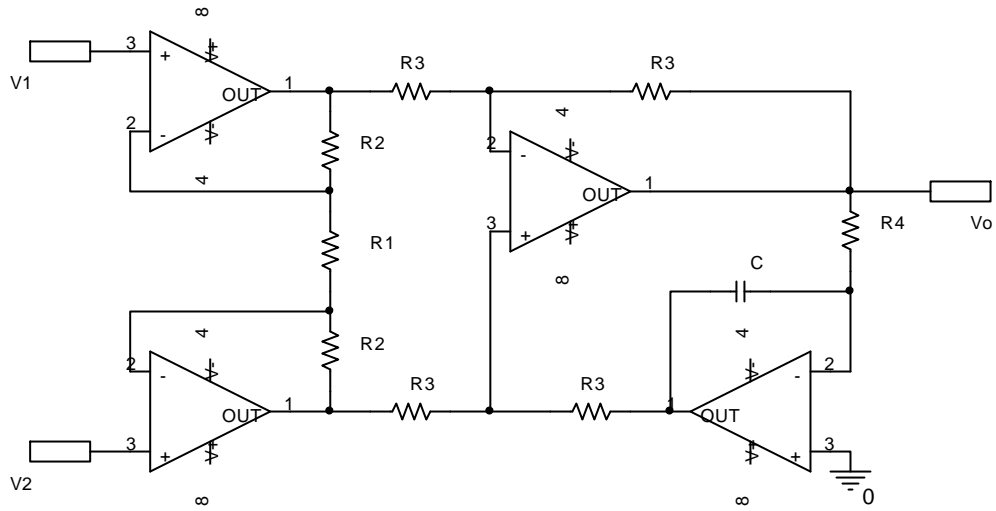
가 . IA  $A_{DM} = \left( \frac{49.4k\Omega}{R_G} + 1 \right)$



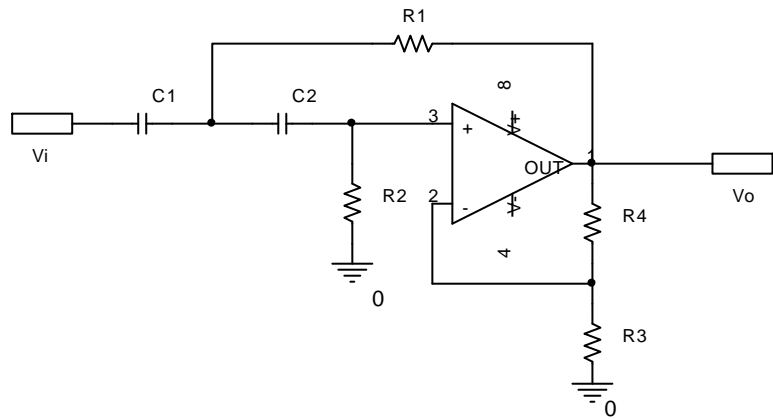
(3)

$$H(j\omega) = \frac{V_o(j\omega)}{[V_2(j\omega) - V_1(j\omega)]}$$

가 . 100 , 0.5 Hz  
 . 60Hz



(4) 2 HPF  $(H_{0HP})$ ,  
 $(\omega_0)$ ,  $Q$   $f_0 = 100 \text{ Hz}$   $Q = 0.707$   
 . Op amp 가 .



(5) SV , HP, LP BP 3 가 ,  
 $\omega_0$   $Q$   $f_0 = 10\text{kHz}$ ,  $BW = 100\text{Hz}$  BPF 가  
 . , LPF HPF 가

