

Q1.

가
,
,
가 가
가
Q&A
가

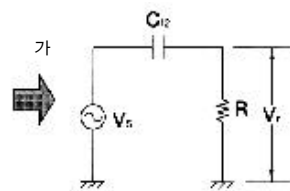
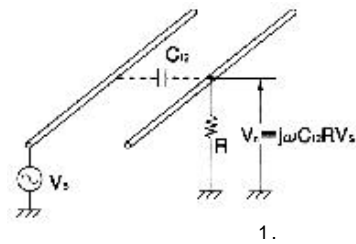
東プレ(株) 長谷川弘

A

가
가

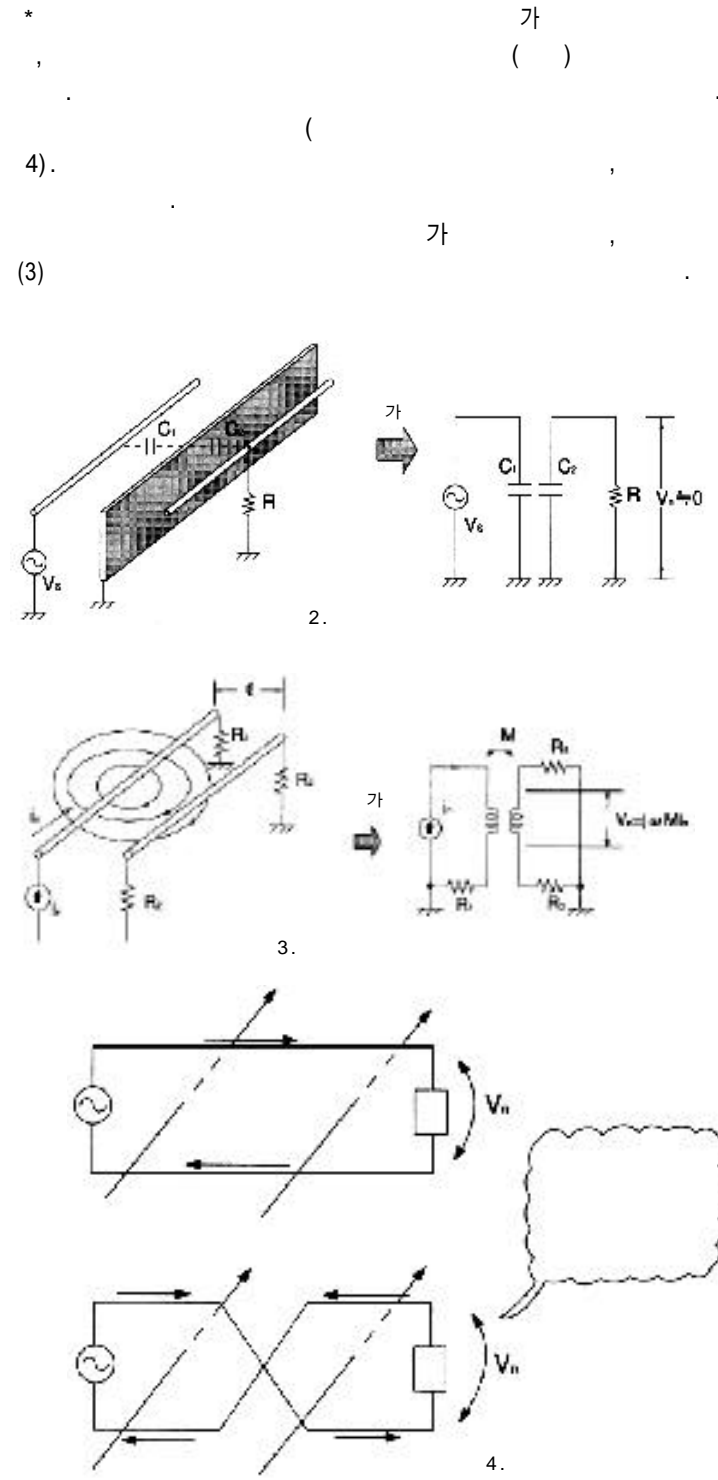
가

가



(1) $i_n = C_{12} \times dV_s/dt$

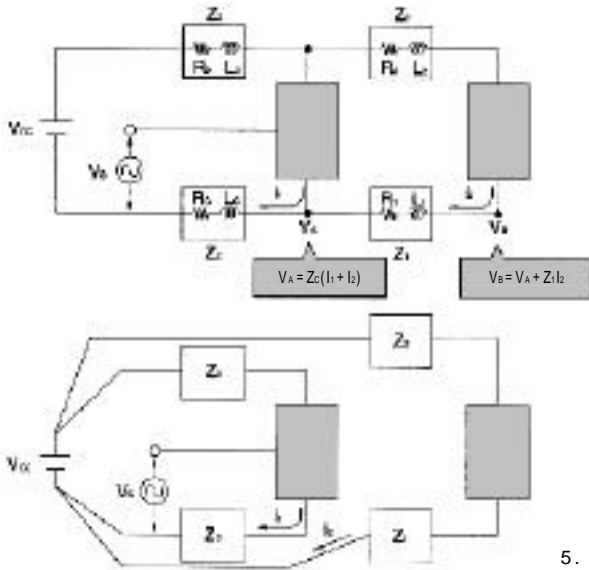
$i_n = j C_{12} V_s$
 $V_n = j C_{12} R V_s$
 $V_n = M \times di_n/dt$
 $di_n/dt = j \omega i_n$
 $V_n = 1 \mu H \times (10^{-3} / 10^{-9}) = 1V$



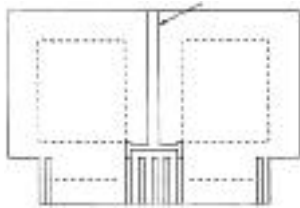
5 (a)
 i_2 가

$Z_c(i_1 + i_2)$ 가

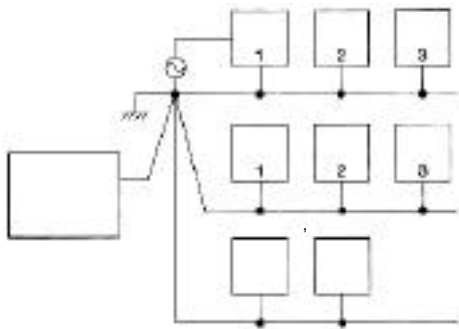
$V_i + Z_c(i_1 + i_2)$
 가



5.



6.



(1)

7.

[1]

$35\mu\text{m}$,
 1mm, 1cm

7nH/cm
 $R_c = 0$ IC
 3nS , i_2 가 20mA
 $e_c = 70\text{mV}$

(,)

[2]

100mV , SN 40dB

가 가

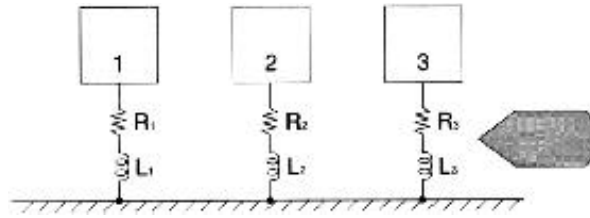
$100\text{mV}/100 = 1\text{mV}$

1

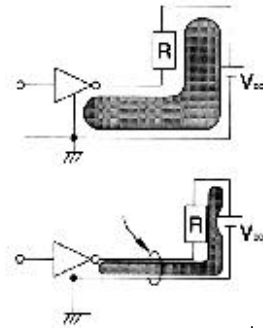
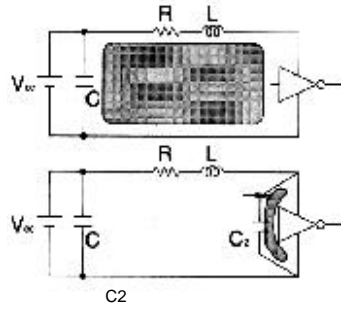
[3]

5 (a)

5 (b)



8.



9.

(1)

M

C_{12}

가

가

가
IC

가
6

(2)

가

가

가

1
7

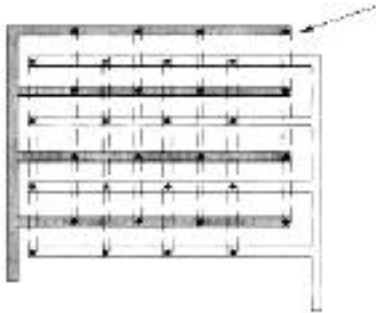
1

, 1

가 ()

1
1

1MHz



10.

$$e = L di/dt$$

$$* L \quad i$$

$$* d/dt(\quad j)$$

$$i \quad (= 2 f)$$

$$L \quad (\text{mesh})$$

$$(\quad 10).$$

가

가

가

가

(9 (a)).

가 가

가 가

(8).

가 1MHz 10MHz
가 1/20

가

가

1 , 1/20

1

10MHz

가

가

/

가

(4)

가

(9 (a), (b))

(3)

가 , 가

L

가

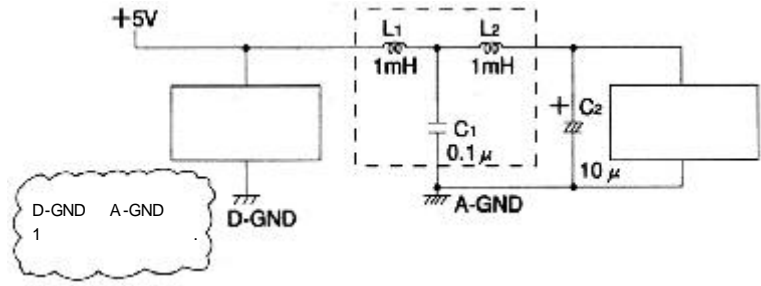
가 가

(5)

i

5 (a)

IC가
L2
IC



11.

IC

IC

(6)

IC

가

가

()

가

가

가

/
가

가

가

PSRR

/

가

가
/

/

가

가

11

가

