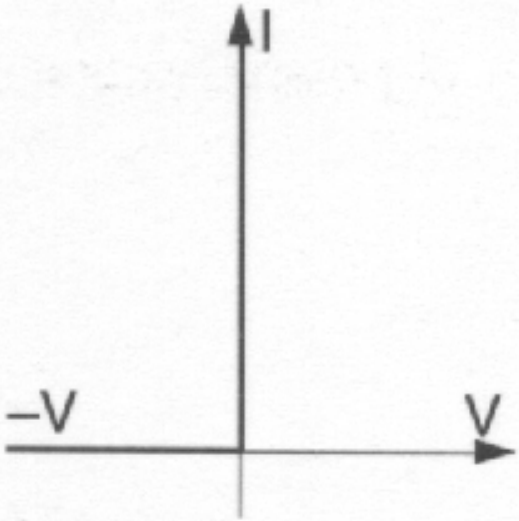


Fig. EN1.1 - Caratteristica ideale del diodo a giunzione.

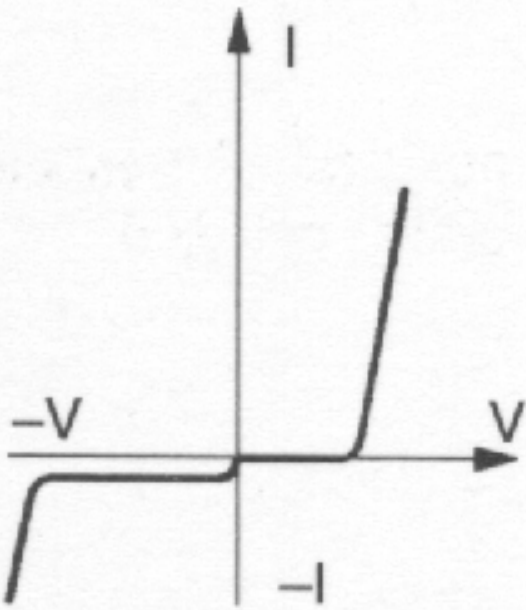


Fig. EN1.2 - Caratteristica reale del diodo a giunzione.

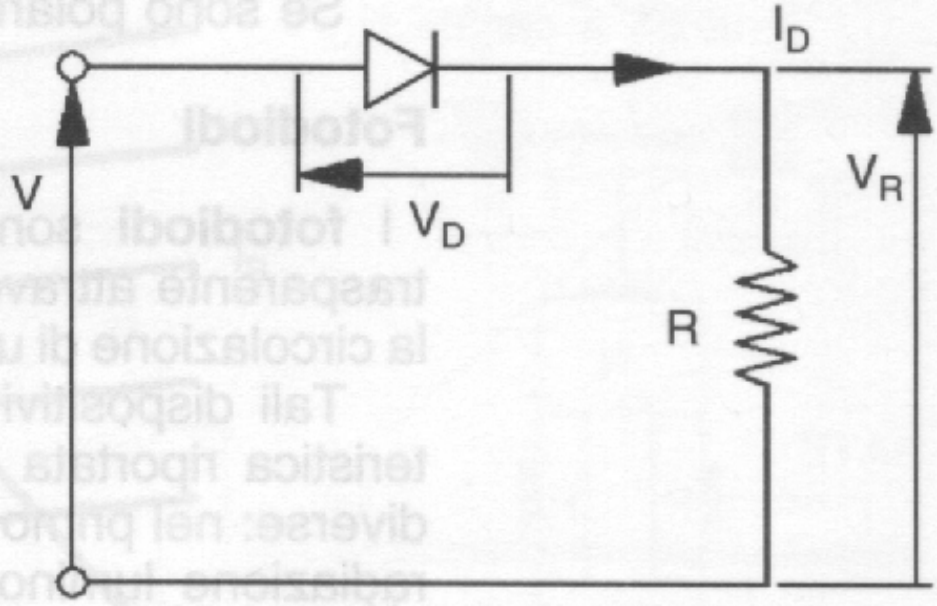


Fig. EN1.3 - Circuito con diodo e resistenza.

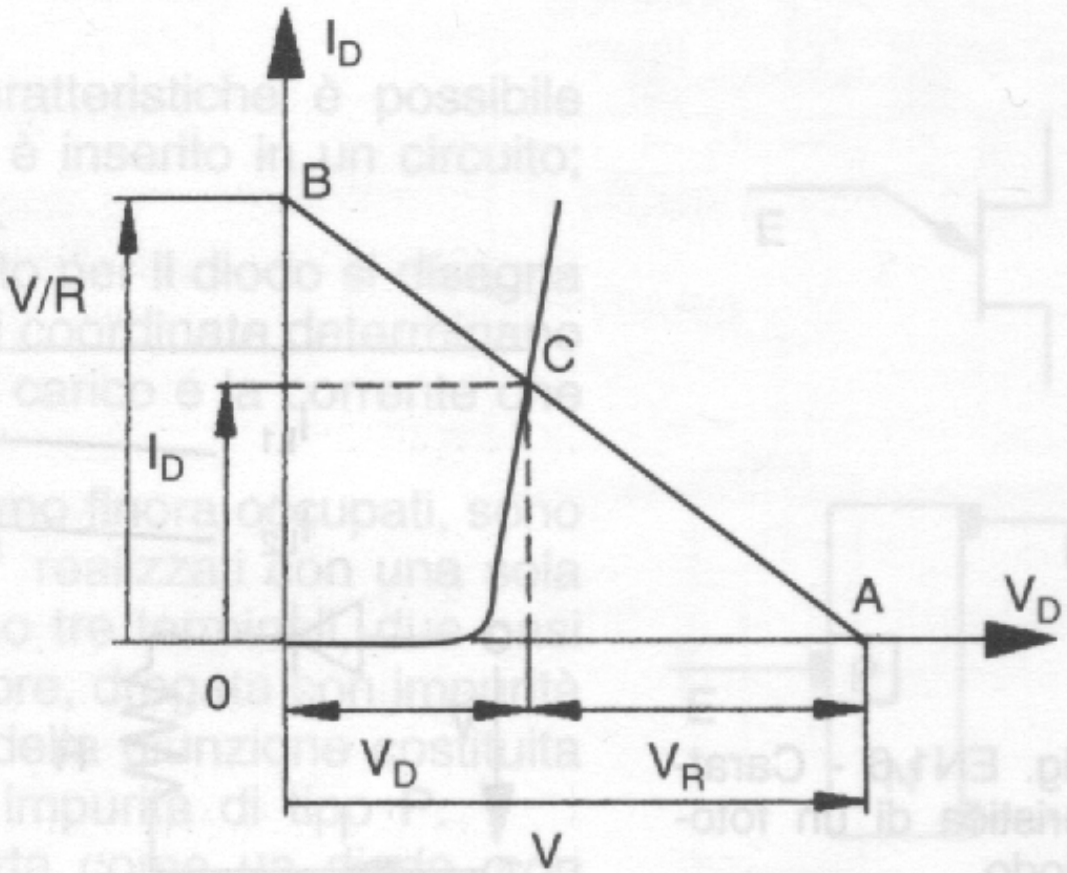
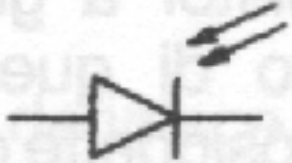
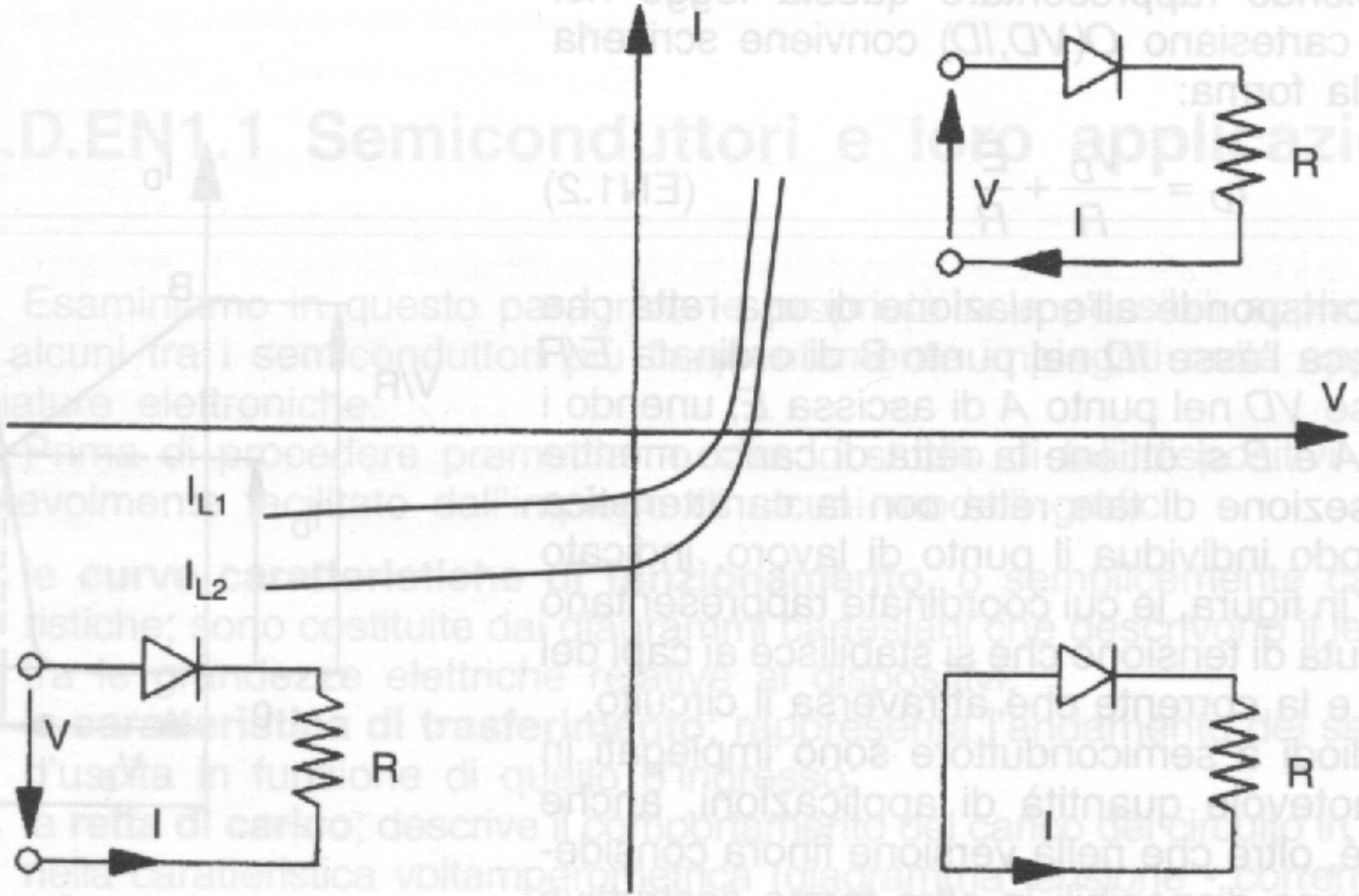
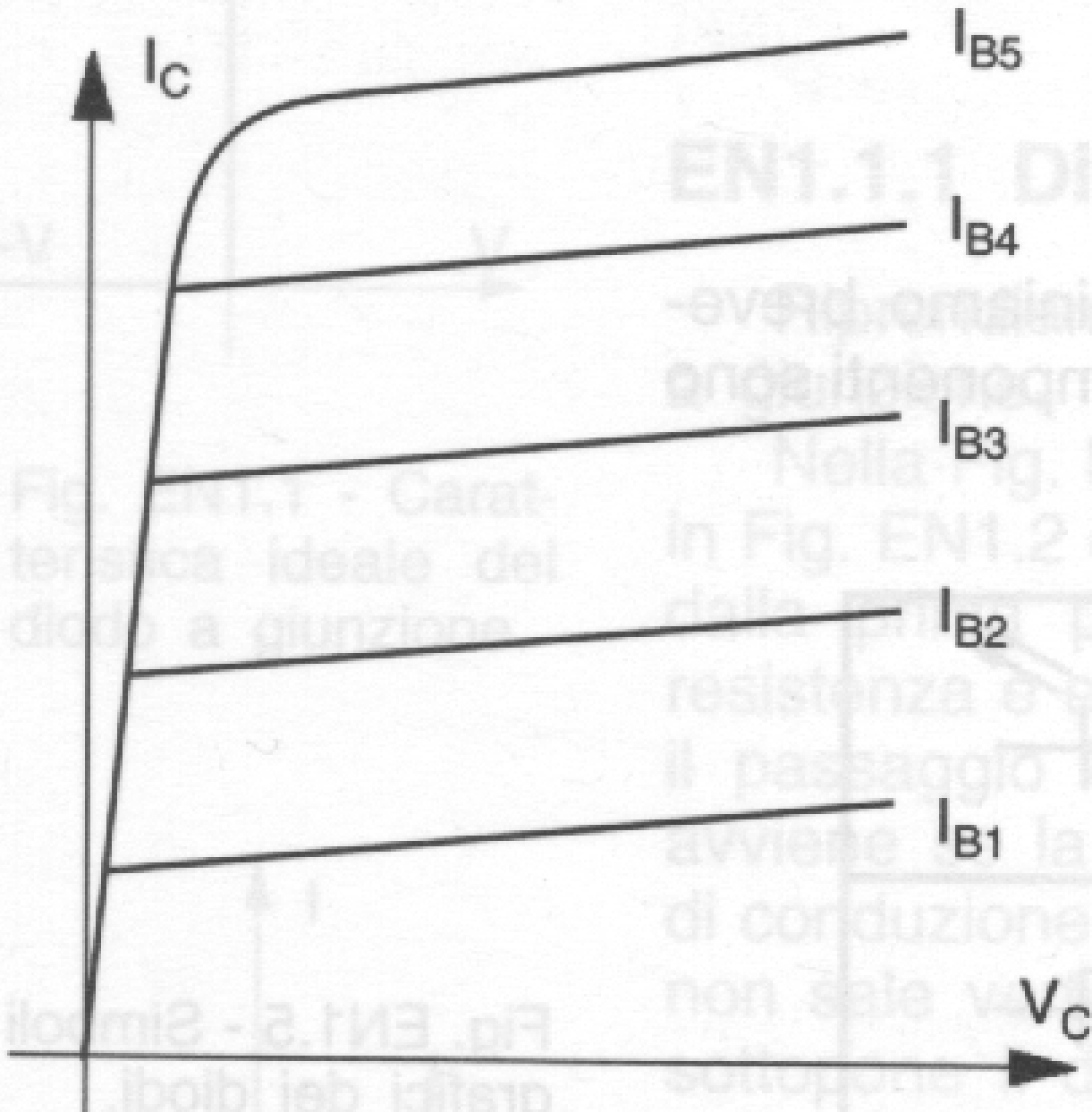
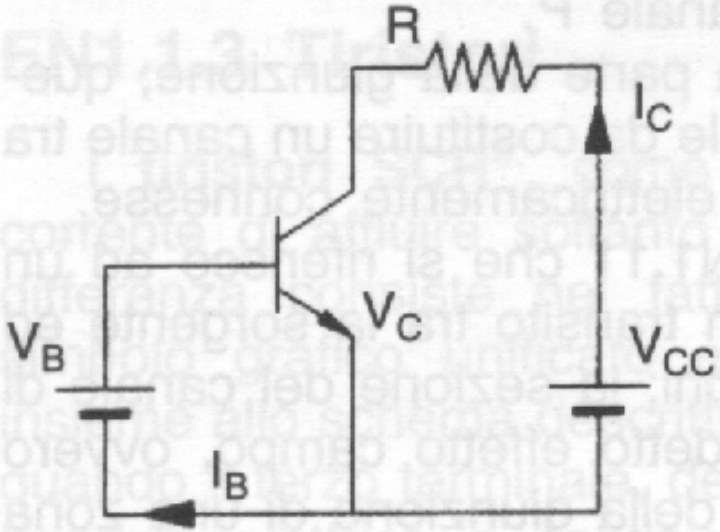


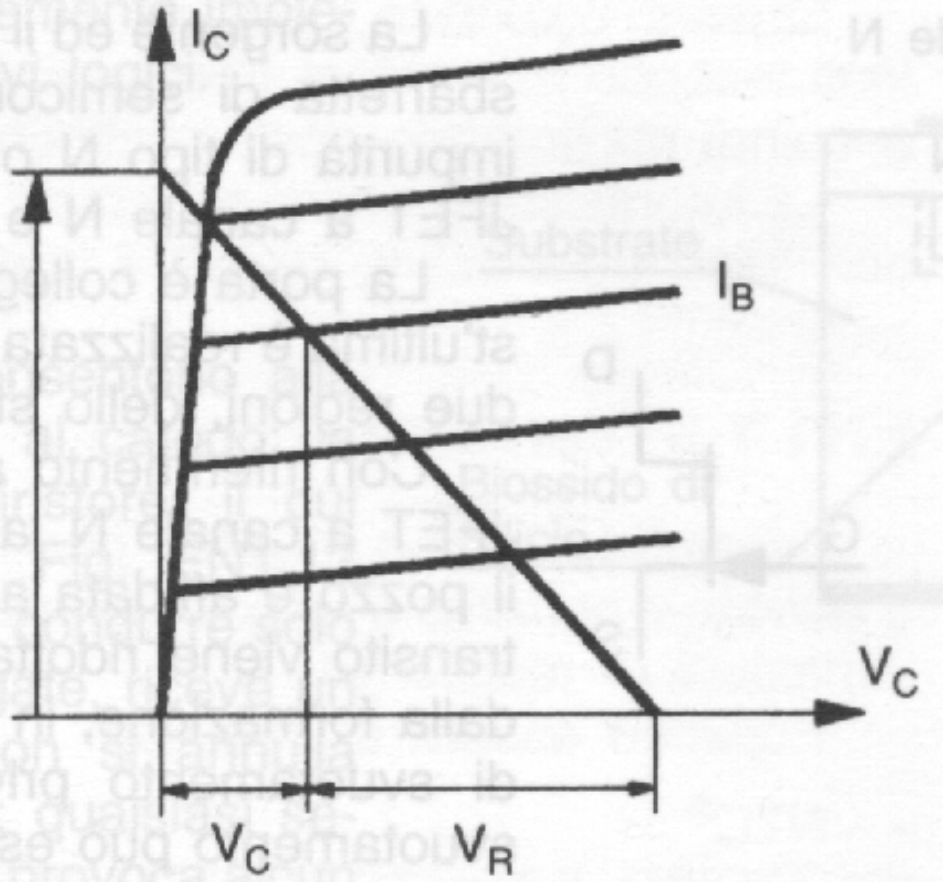
Fig. EN1.4 - Caratteristica di polarizzazione del diodo.

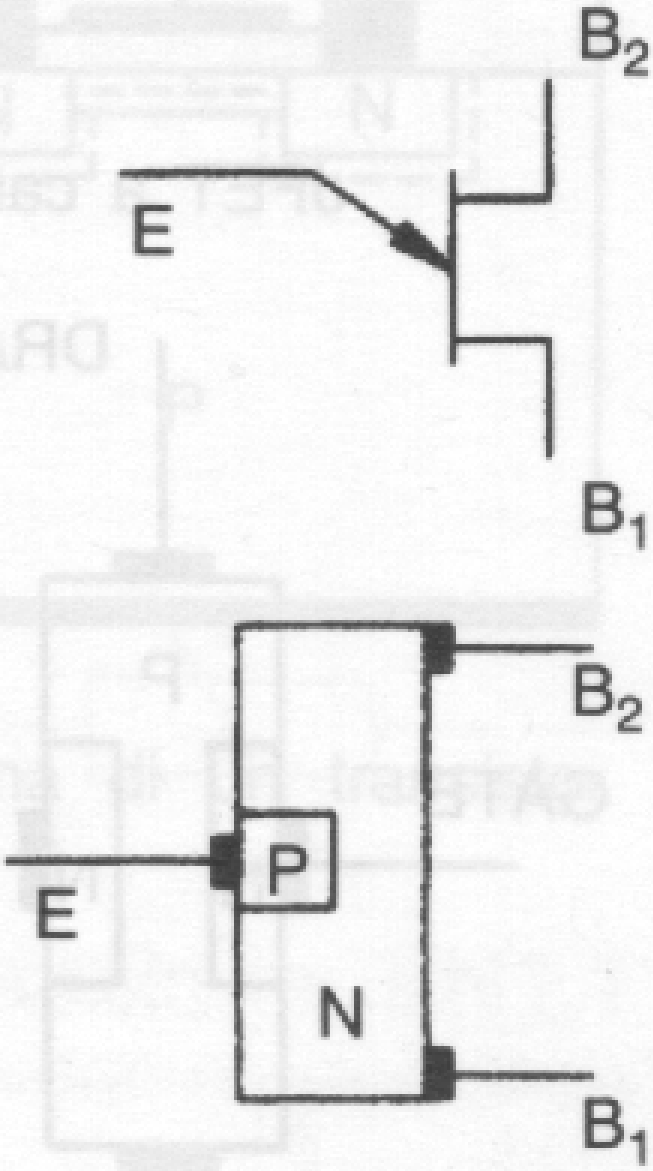
DIODO 	DIODO LED 
FOTODIODO 	DIODO ZENER 


I
V
I_{L1}
I_{L2}
R
V
I
R
V
I
R
I

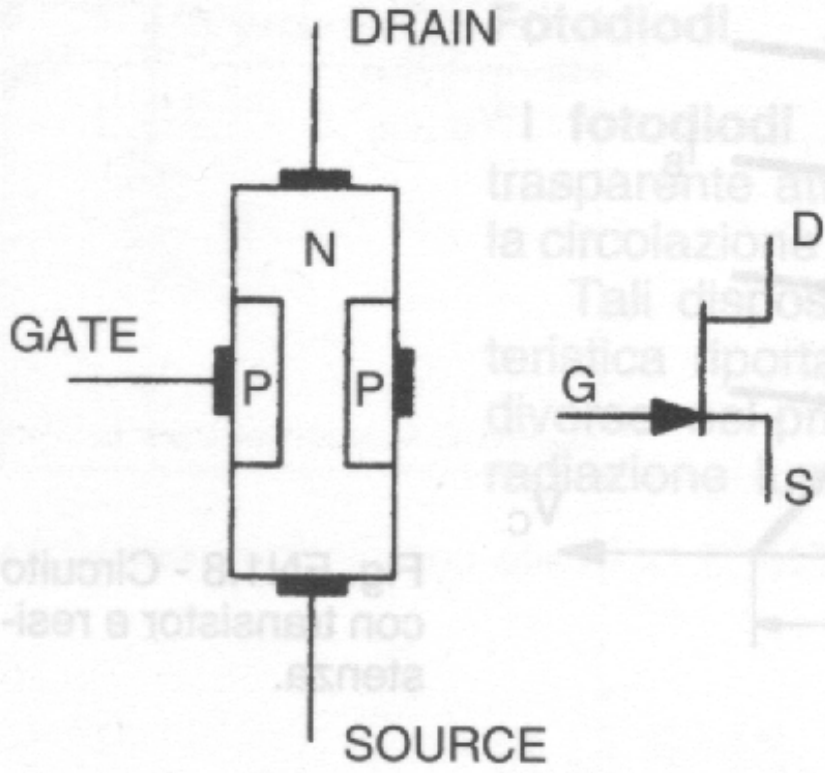

I_C
I_{B5}
I_{B4}
I_{B3}
I_{B2}
I_{B1}
V_C


R
I_C
V_B
V_C
V_{CC}
I_B

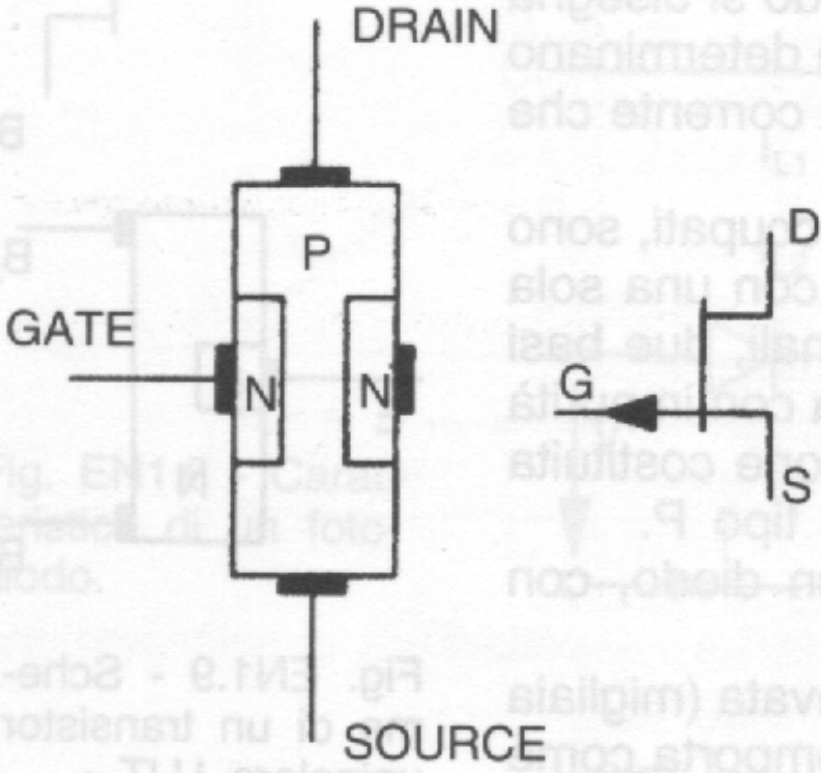

I_C
$\frac{V_B}{R}$
I_B
V_C
V_C
V_R

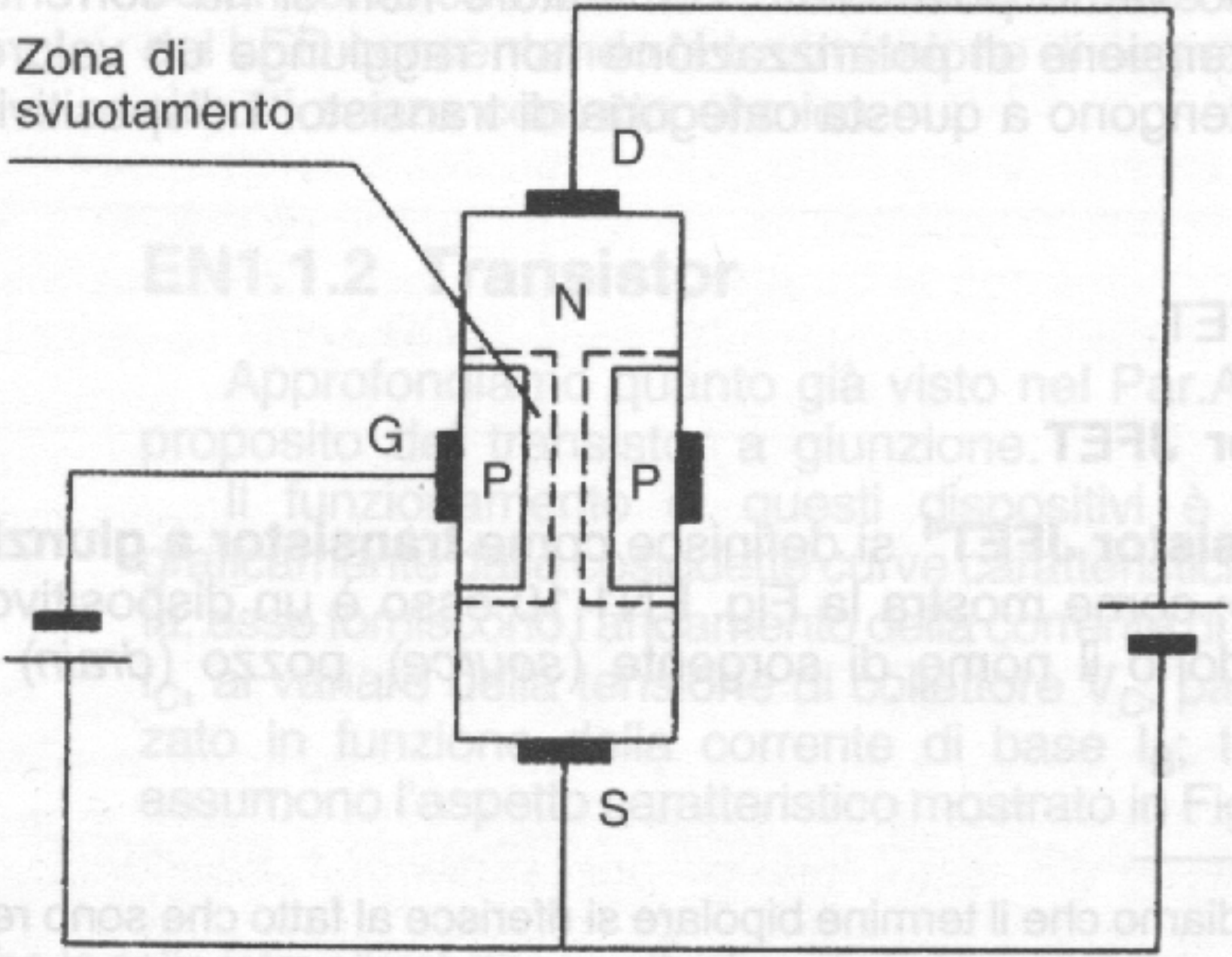

B2
E
B1
B2
P
E
N
B1

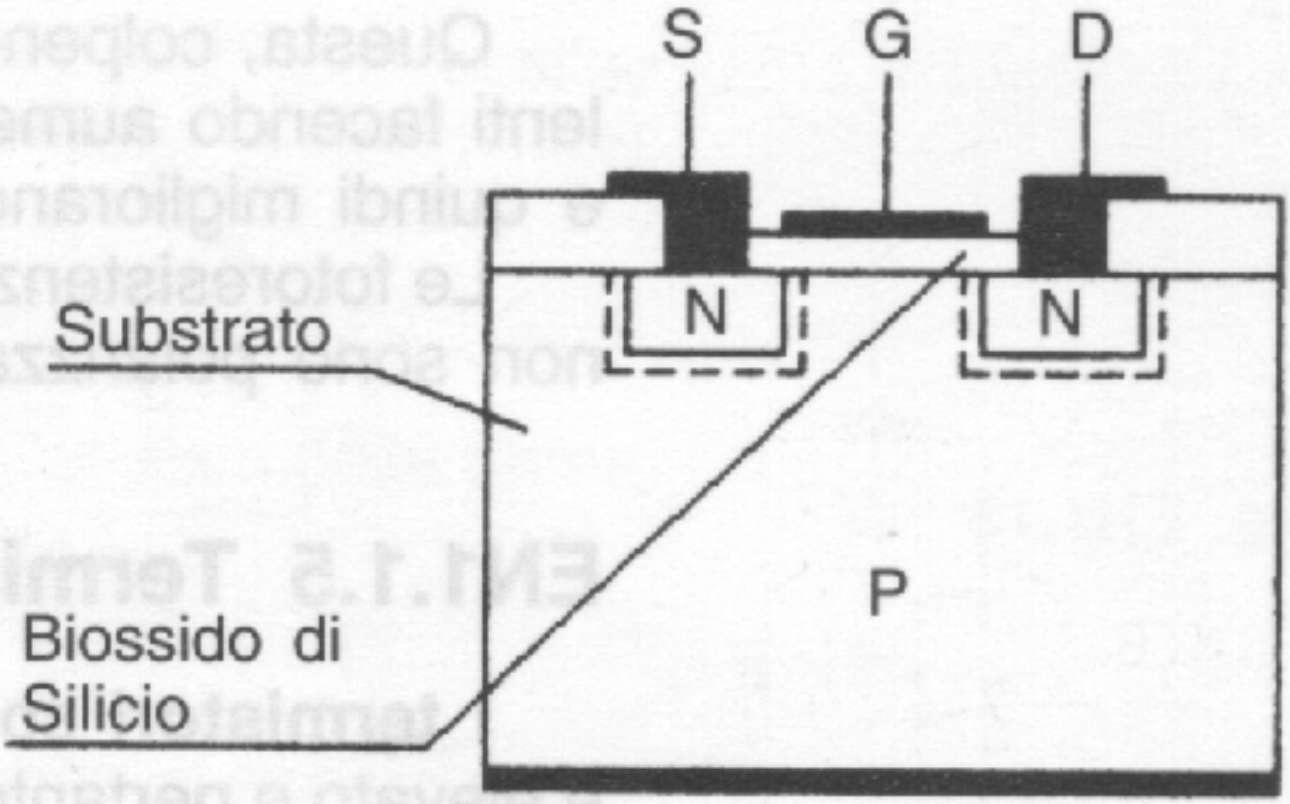
JFET a canale N

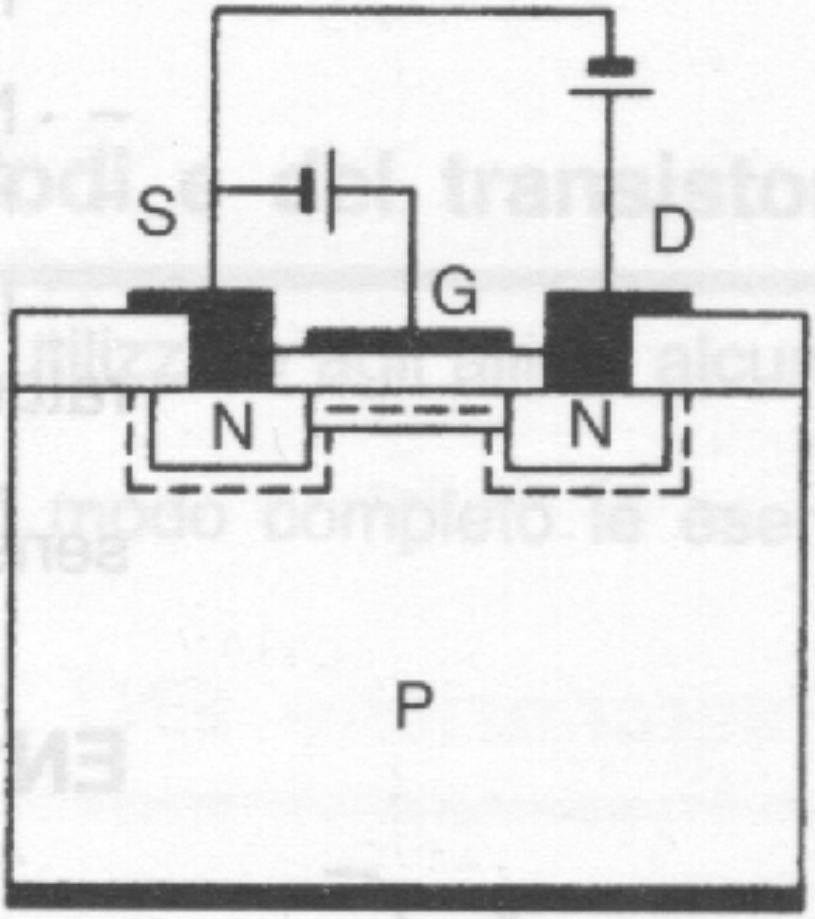


JFET a canale P




Zona di
svuotamento
D
N
G
P
P
S


S
G
D
N
N
Substrato
P
Biossido di
Silicio


S
G
D
N
N
P

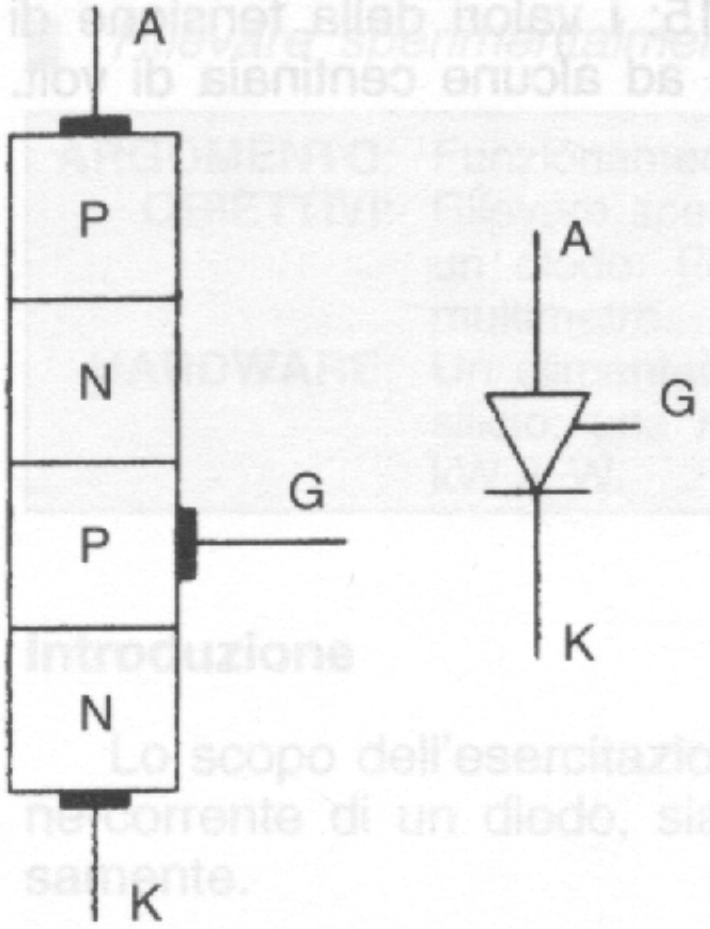


Fig. EN1.13 - Tiristore SCR.

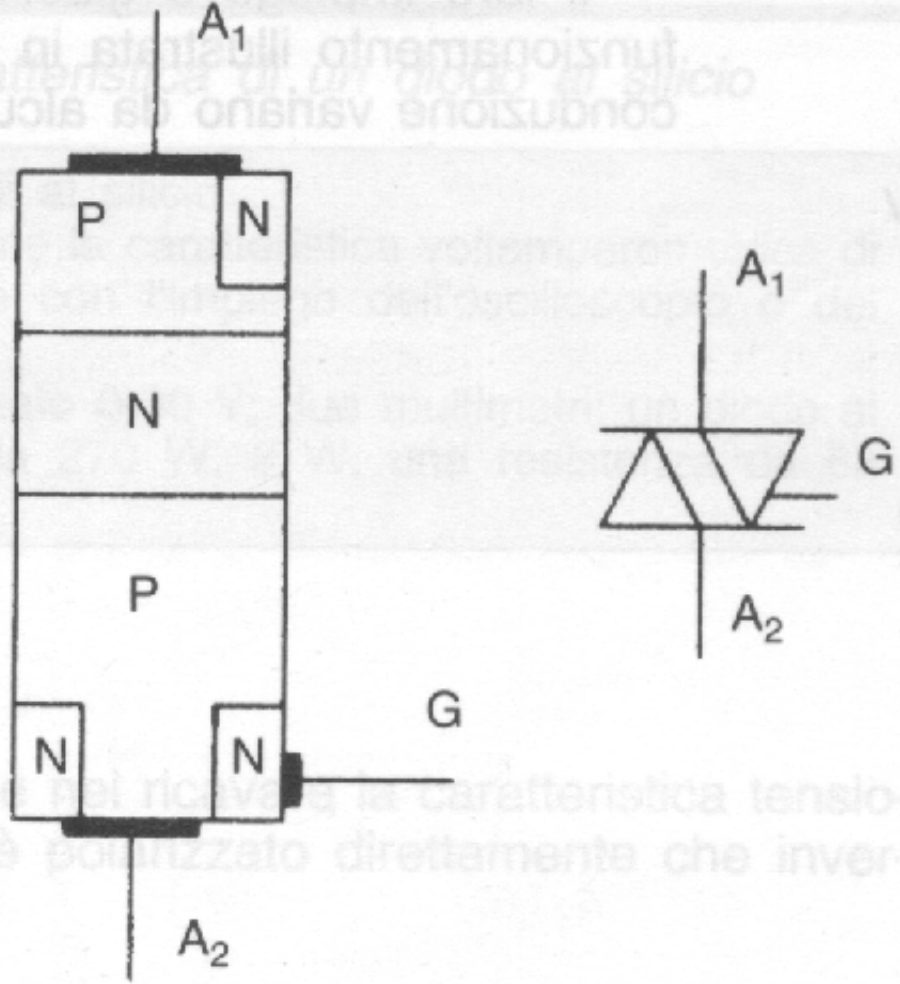
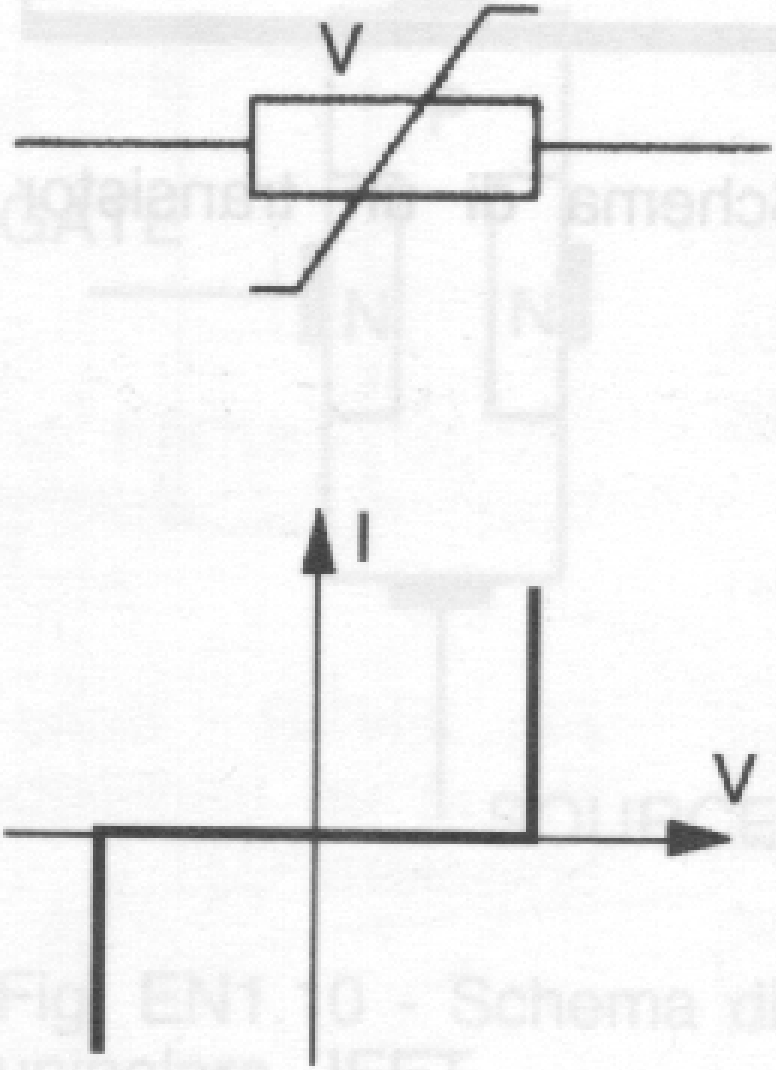
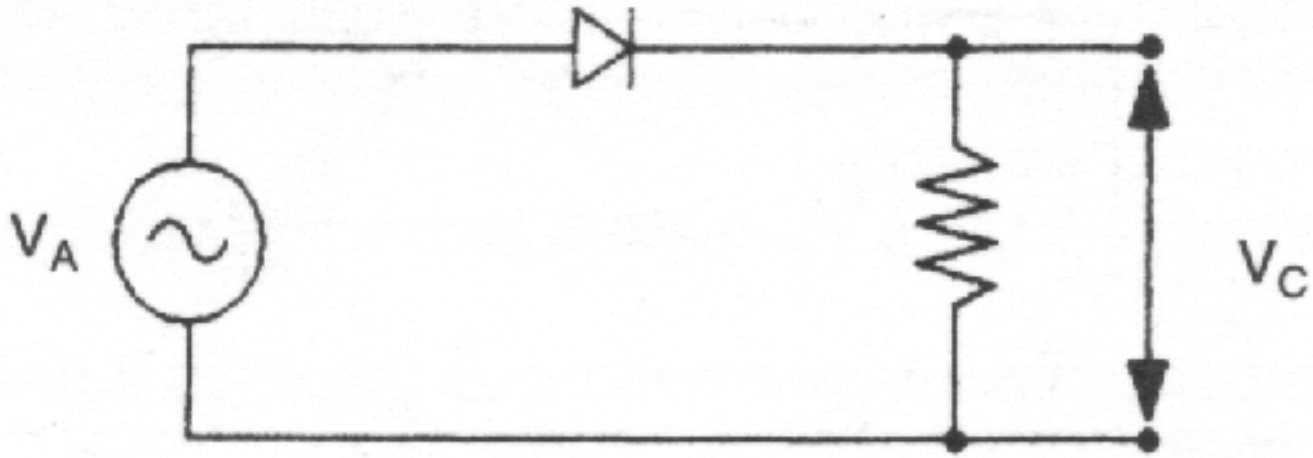
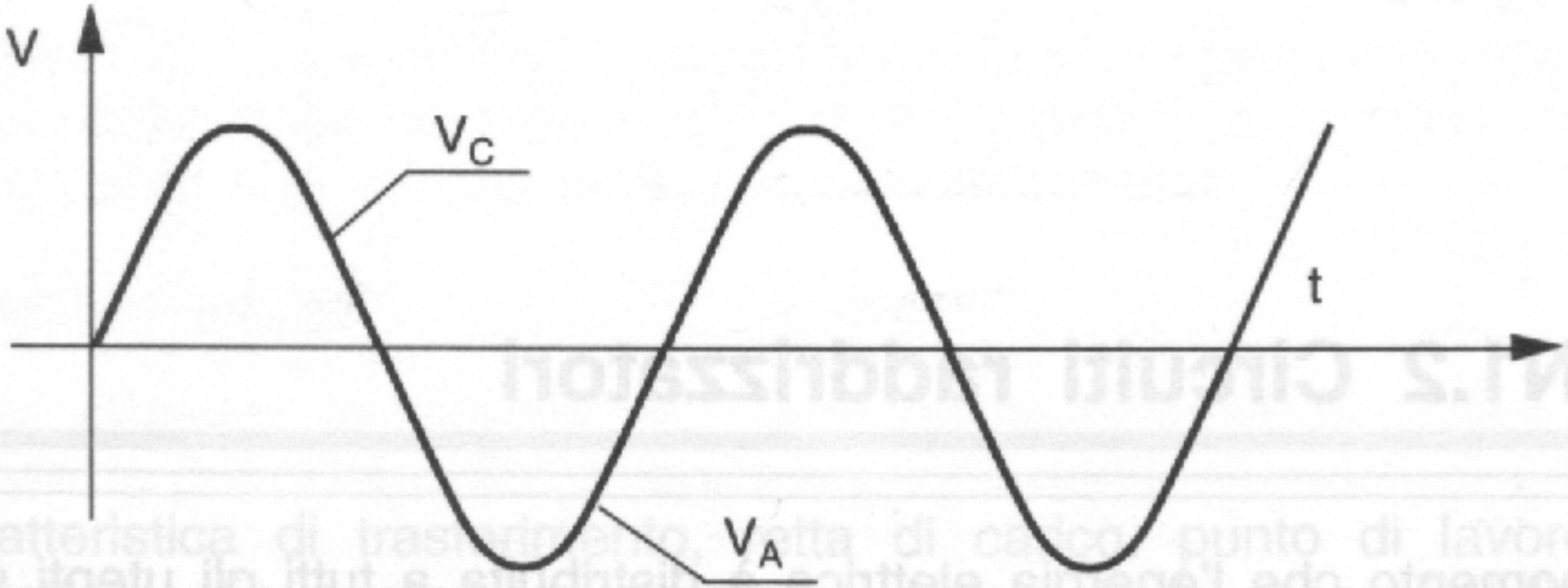
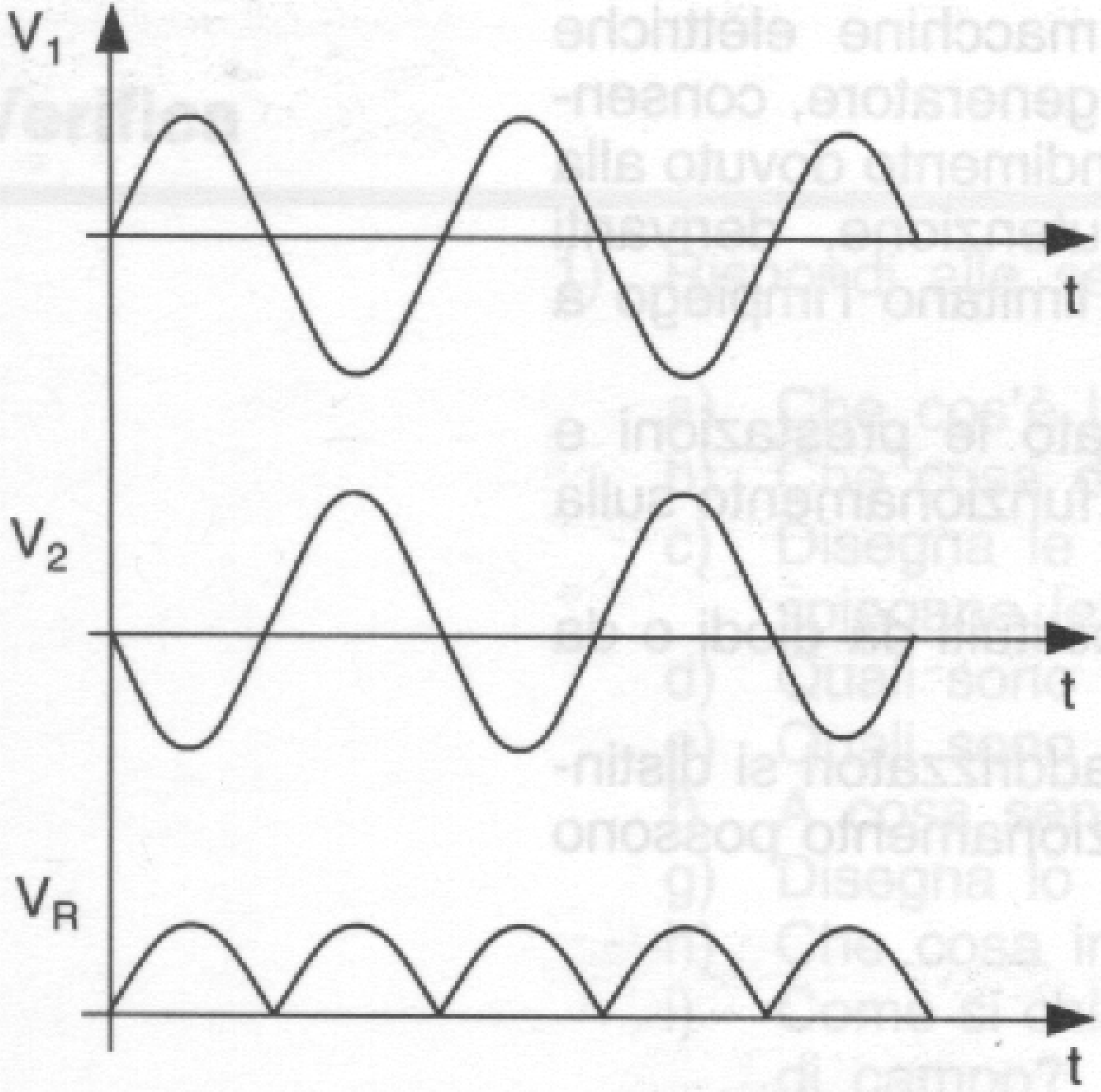


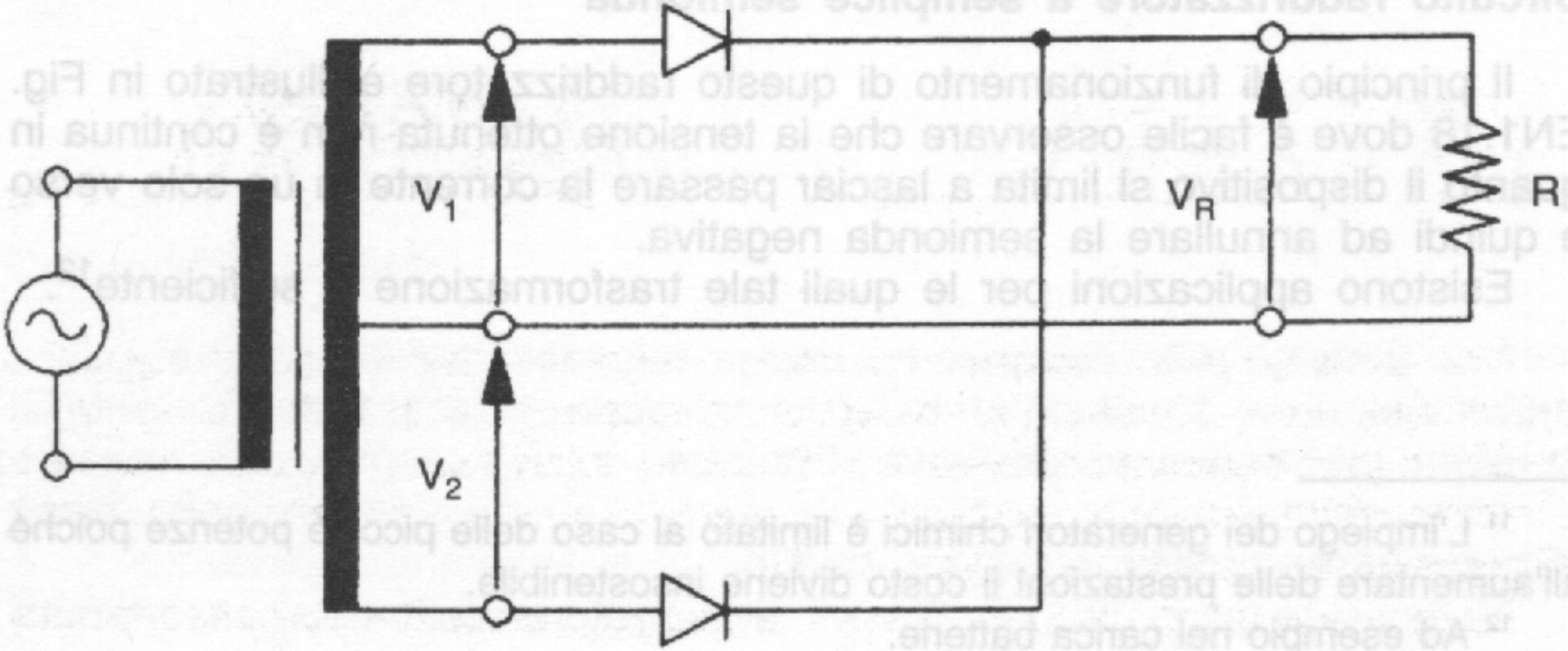
Fig. EN1.14 - Tiristore TRIAC.

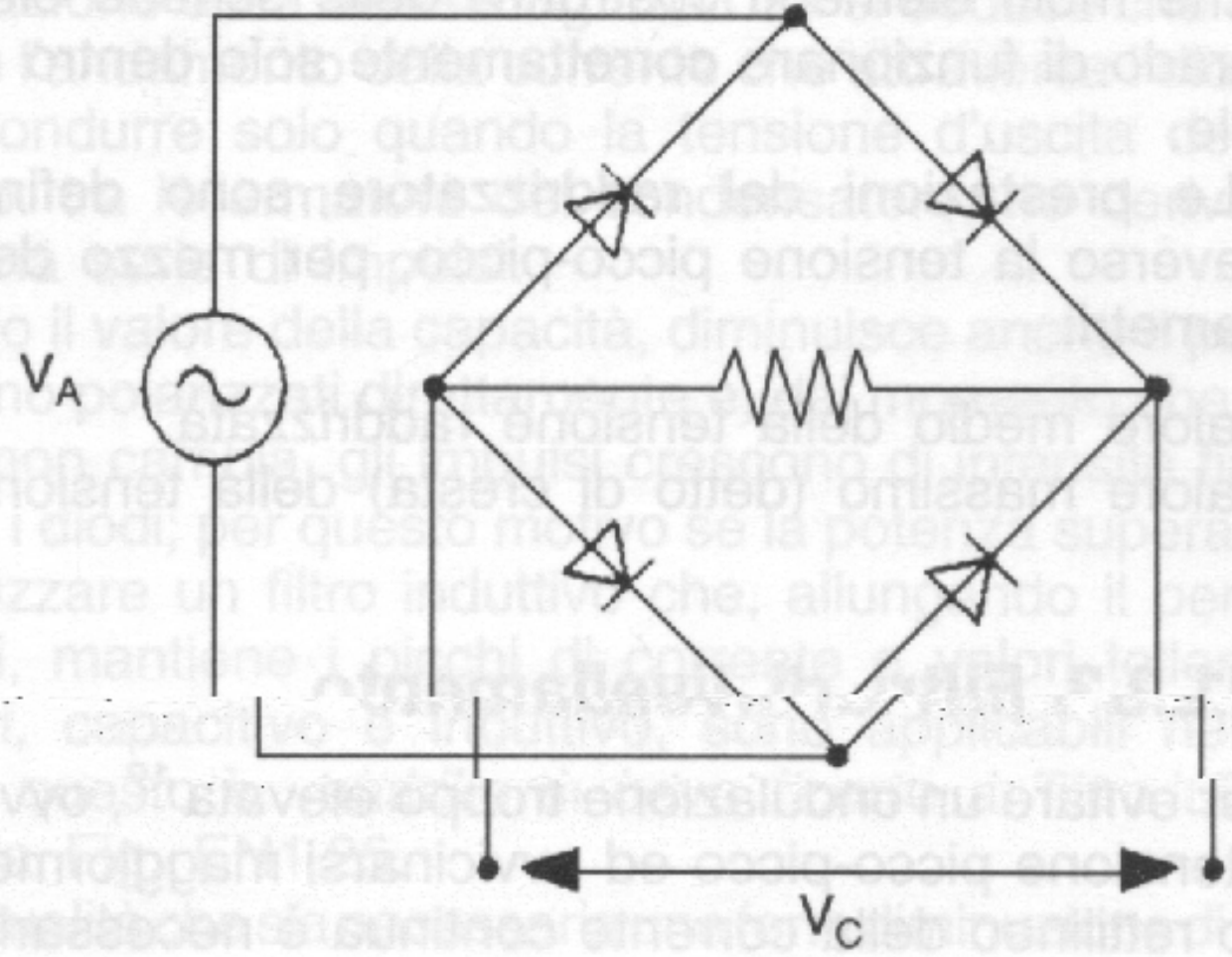

V
I
V

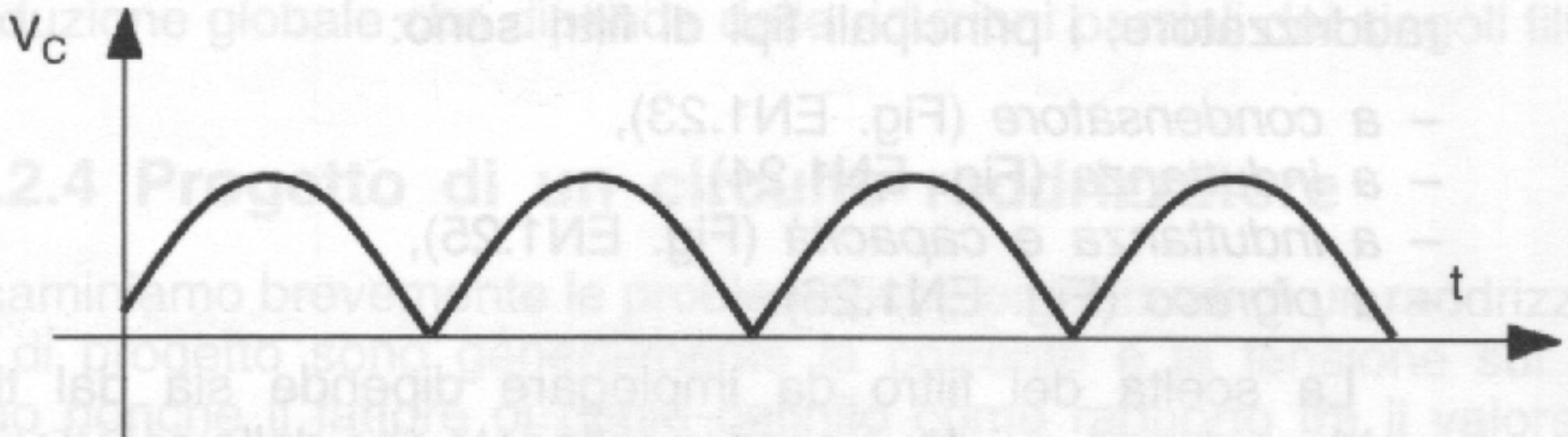

V_A
V_C


V
V_C
t
V_A

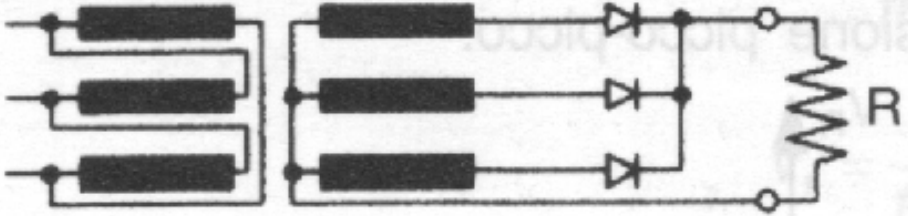

V_1
t
V_2
t
V_R
t

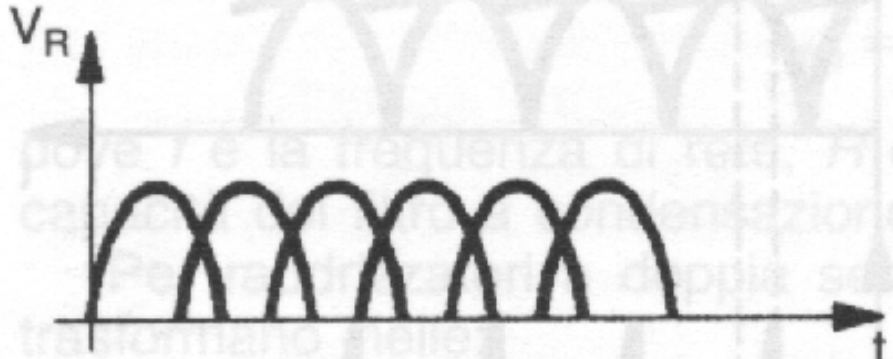

V1
V2
VR
R


V_A
V_C

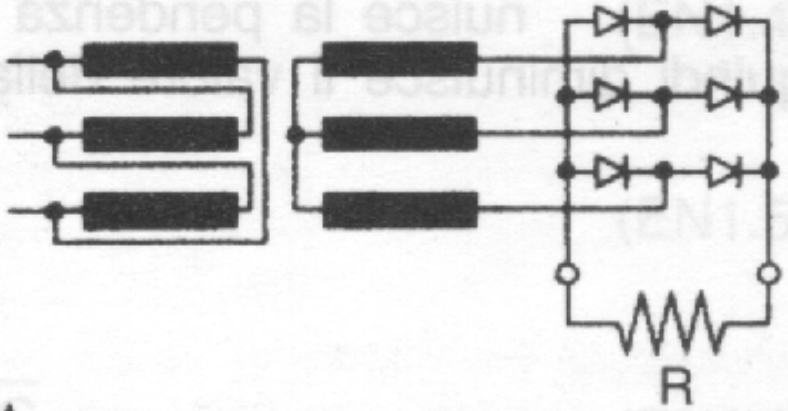

V_C
t

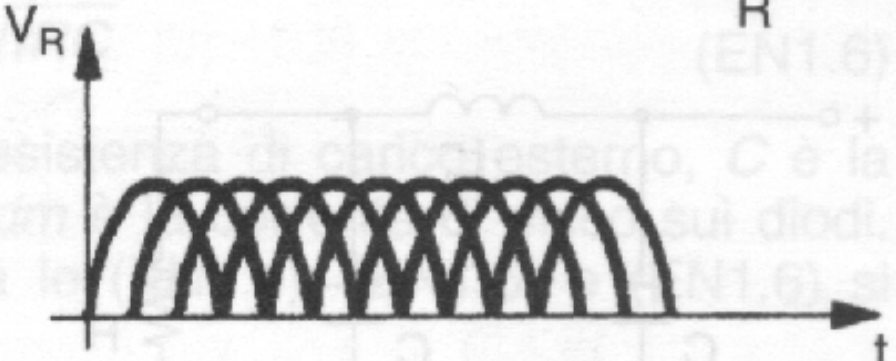
(A)





(B)





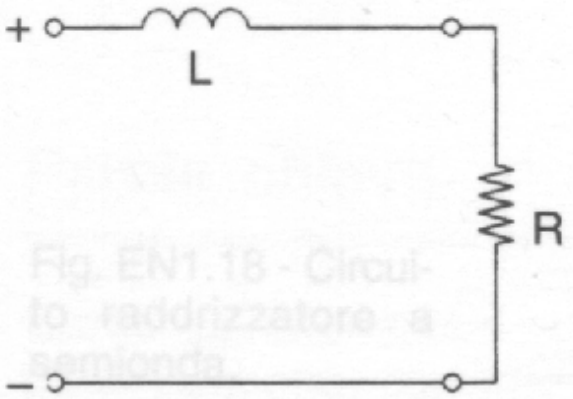


Fig. EN1.24 - Filtro di livellamento ad induttanza.

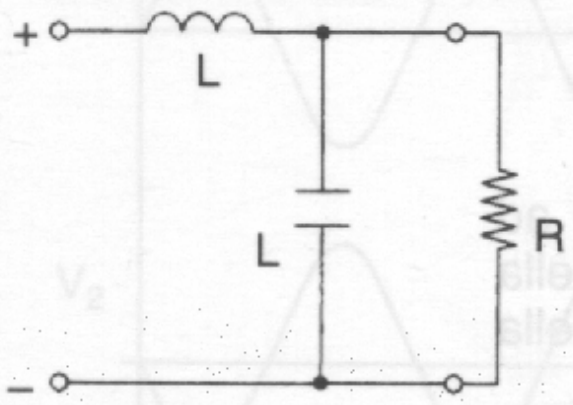
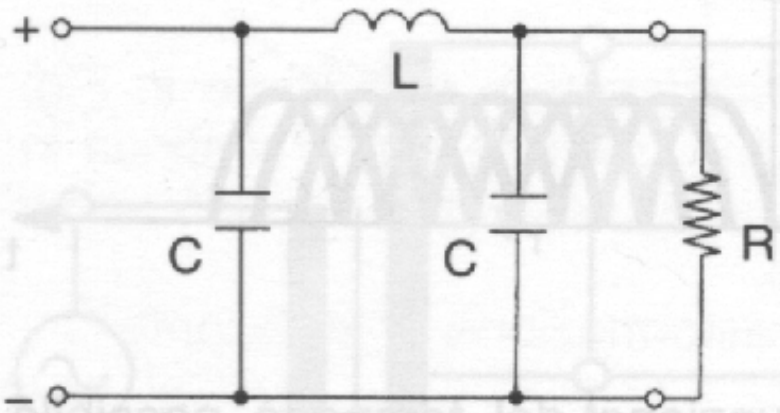
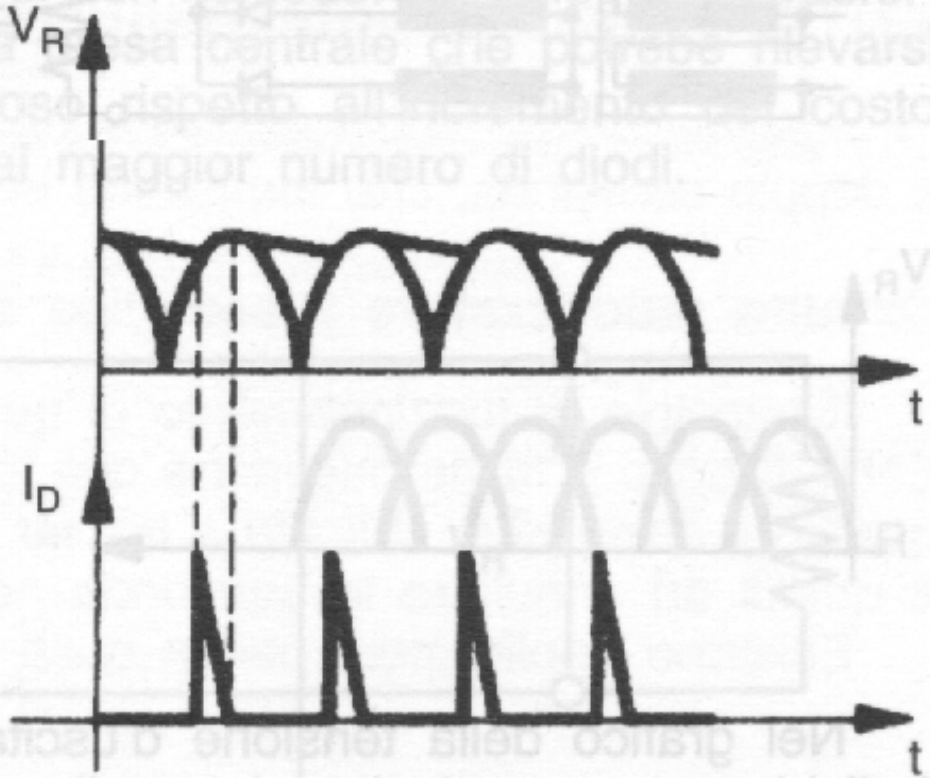
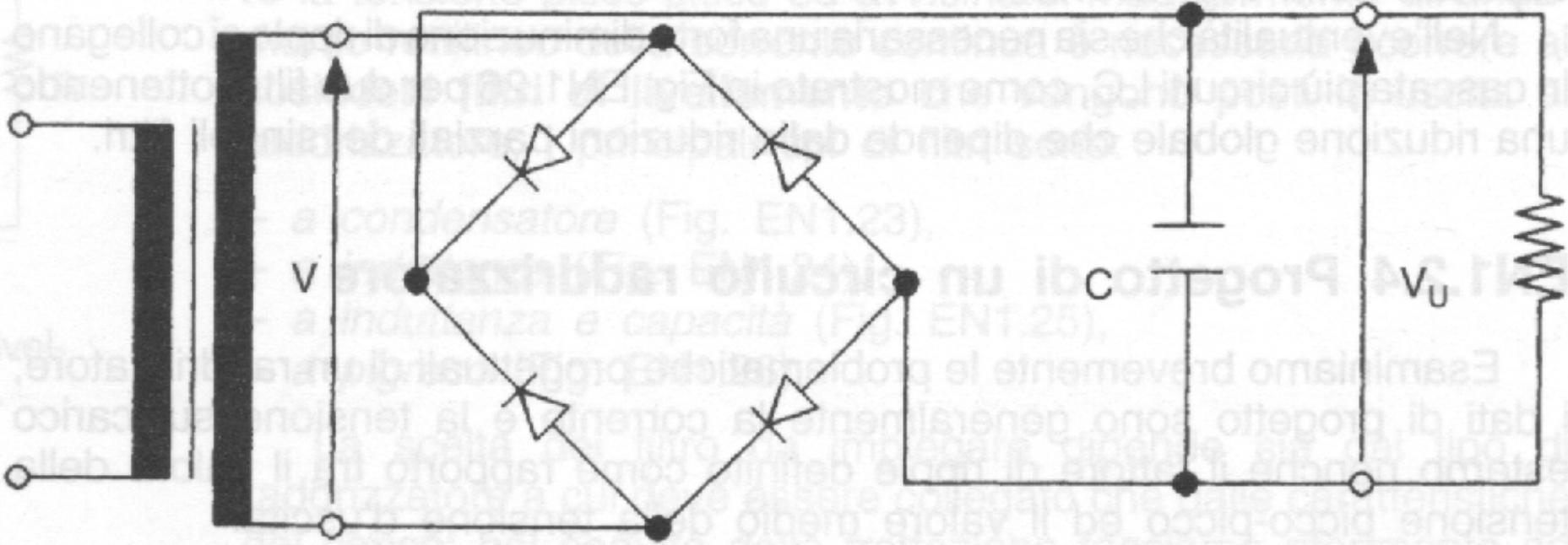


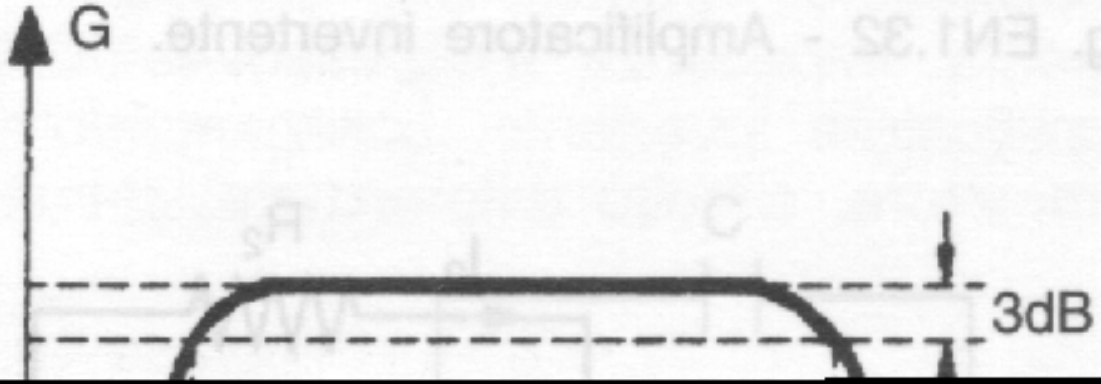
Fig. EN1.25 - Filtro di livellamento a induttanza e capacità.


+
L
C
C
R
–


V_R
t
I_D
t


V
C
V_U

Vu/Vi Iu/Ii	dB	Vu/Vi Iu/Ii	dB	Pu/Pi	dB	Pu/Pi	dB
1	0	40	32	1	0	50	17
1,4	3	50	34	2	3	80	19
2	6	80	38	4	6	100	20
4	12	100	40	5	7	1000	30
5	14	200	46	10	10	10000	40
10	20	1000	60	20	13		
20	26	10000	80	40	16		


G
3dB

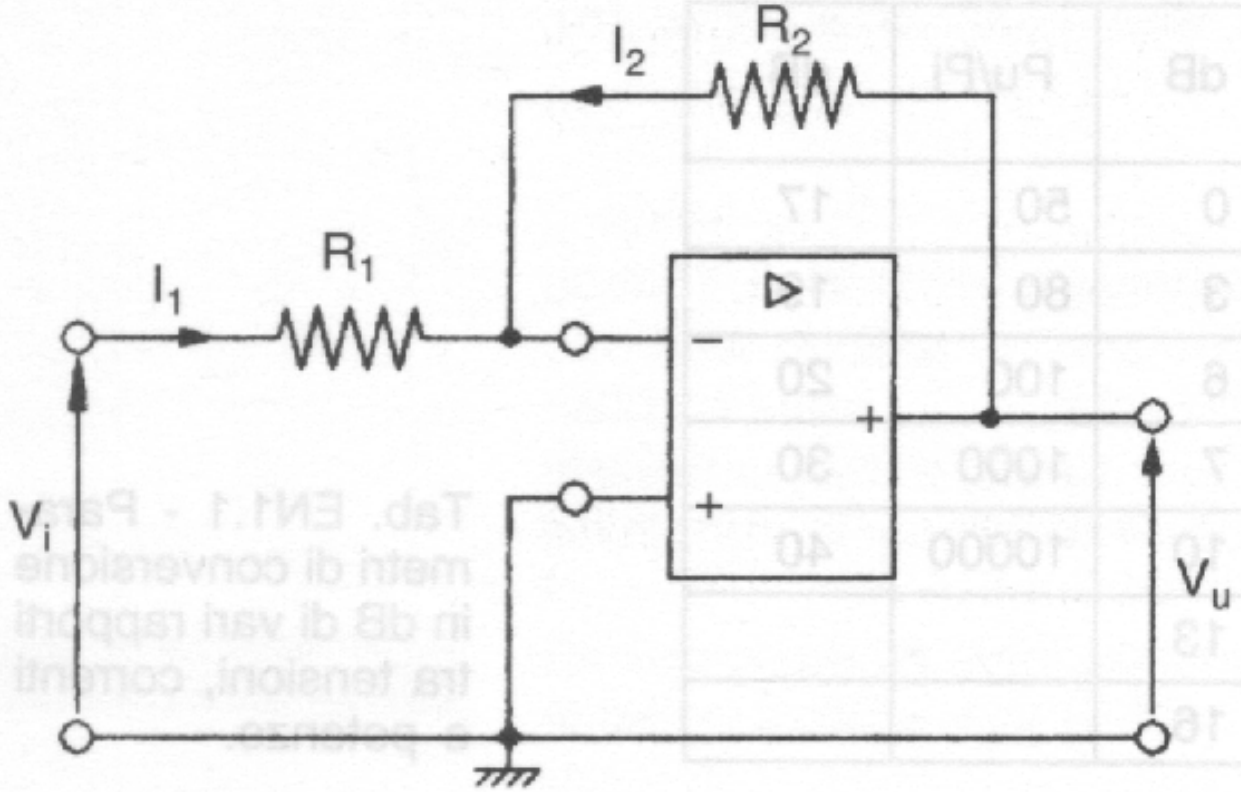
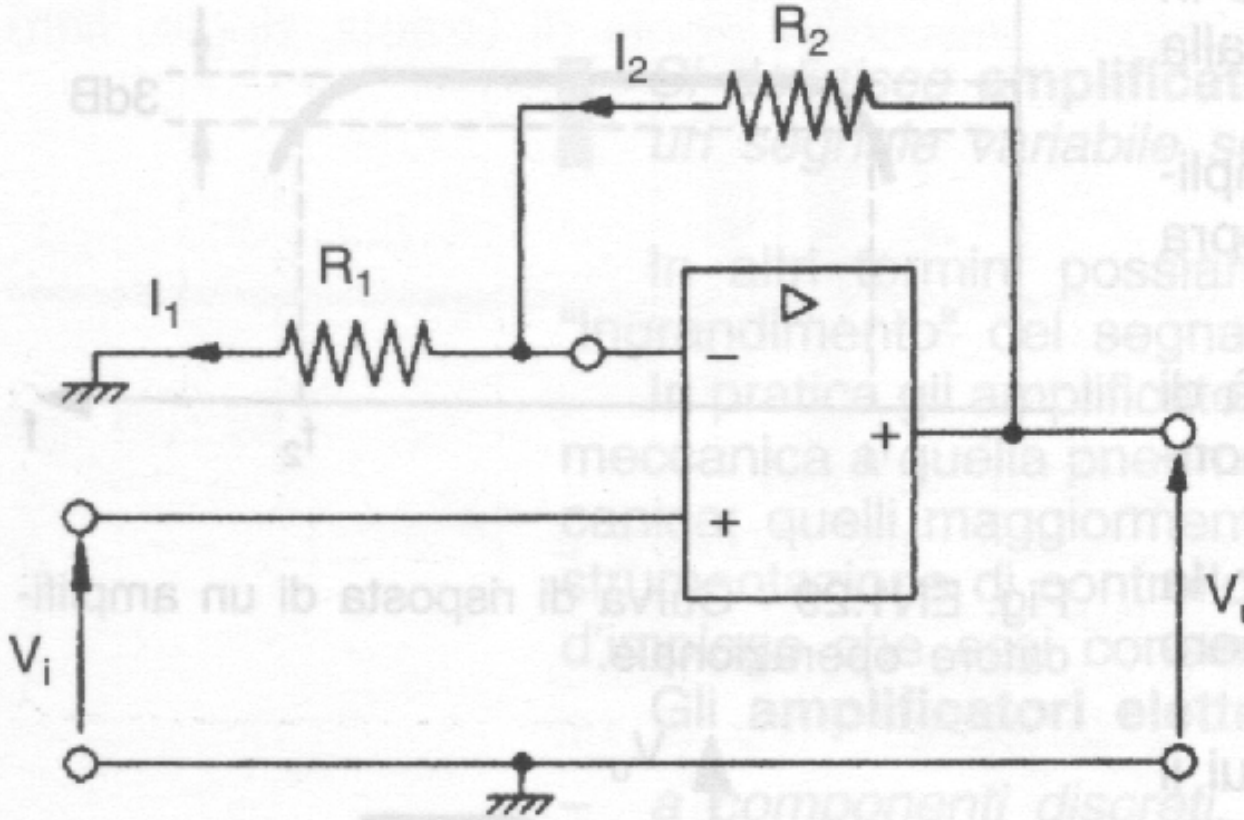


Fig. EN1.32 - Amplificatore invertente.



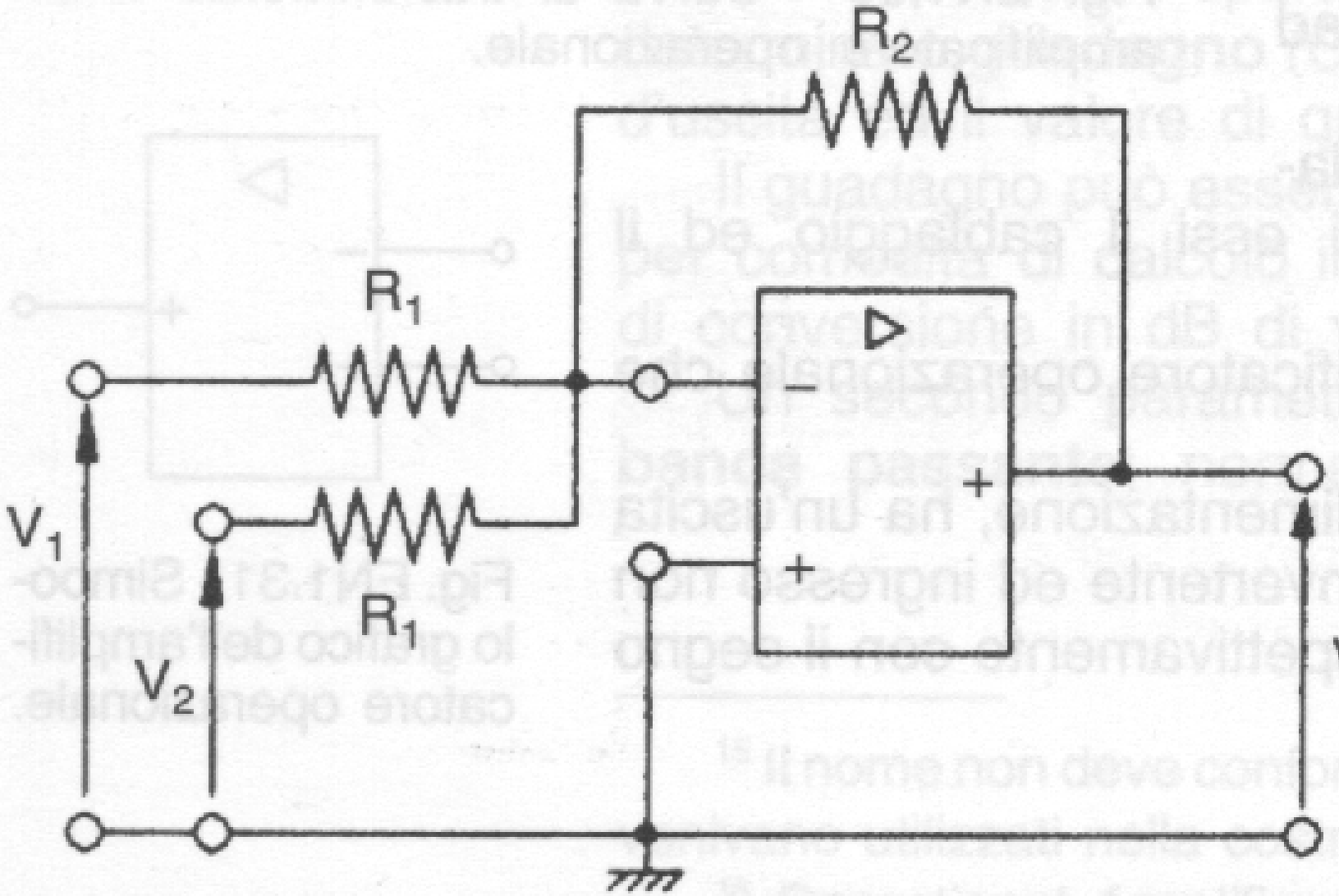
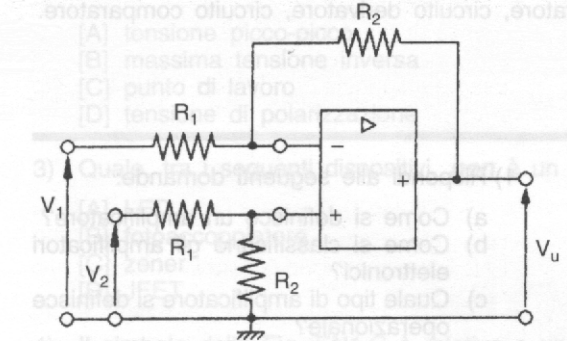
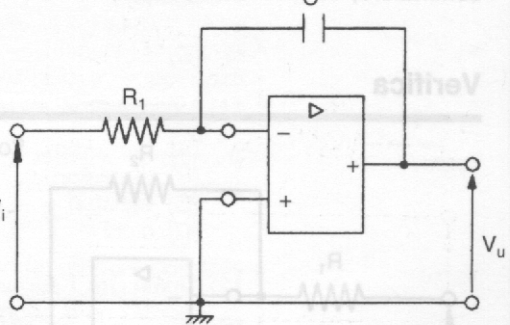


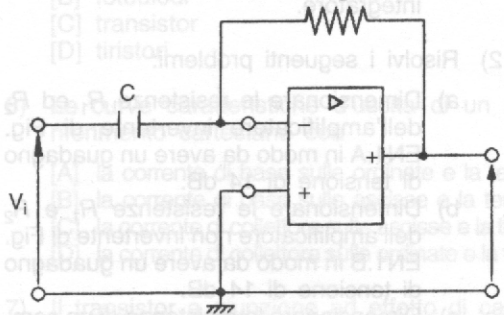
Fig. EN1.34 - Amplificatore sommatore invertente.



$$V_u = -(V_1 - V_2)R_2/R_1$$



$$V_u = \frac{V_i X_C}{R_1} \quad \text{con} \quad X_C = \frac{1}{6{,}28\,fC}$$



$$V_u = \frac{V_i R_2}{X_C} \quad \text{con} \quad X_C = \frac{1}{6{,}28fC}$$