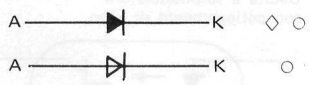
SELEZIONE DI TECNICA
RADIO TV HIFI ELETTRONICA

SIMBOLI GRAFICI PER SCHEMI ELETTRICI

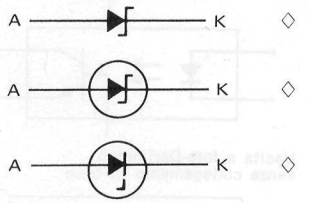
SEMICONDUTTORI

DIODI

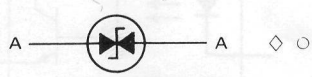
Diodo rettificatore (a giunzione)



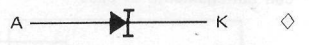
Diodo zener unidirezionale



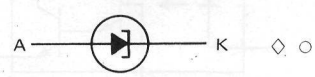
Diodo zener bidirezionale



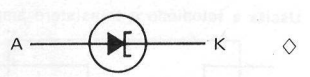
Diodo a corrente costante (ad effetto di campo)



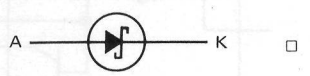
Diodo tunnel



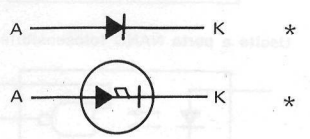
Diodo tunnel rettificatore



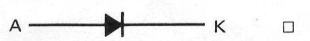
Diodo Schottky (hot-carrier)



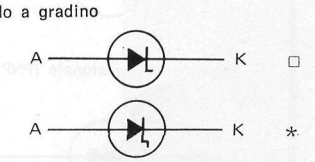
Diodo pin



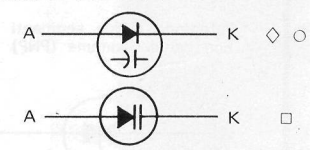
Diodo Gunn



Diodo a gradino

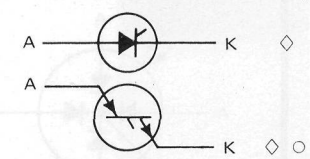


Diodo varactor o varicap (a capacità variabile)

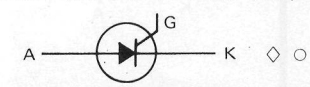


TIRISTORI

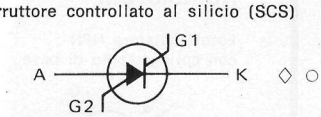
Diodo a quattro strati (PNPN o Shockley)



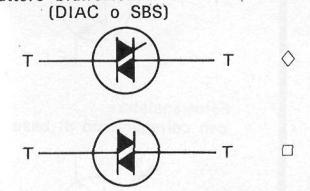
Rettificatore controllato al silicio (SCR)



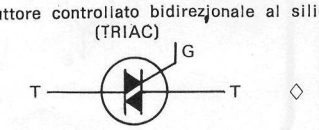
Interruttore controllato al silicio (SCS)



Interruttore bidirezionale al silicio (DIAC o SBS)

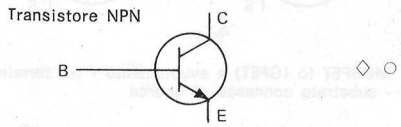


Interruttore controllato bidirezionale al silicio (TRIAC)

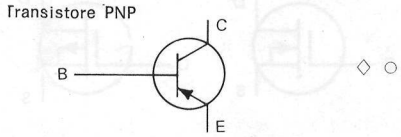


TRANSISTORI

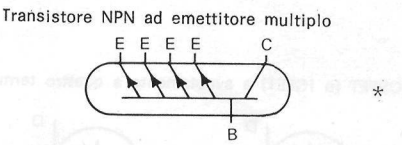
Transistore NPN



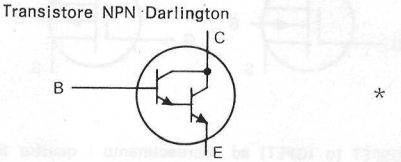
Transistore PNP



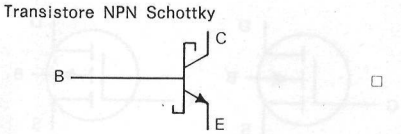
Transistore NPN ad emettitore multiplo



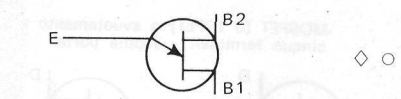
Transistore NPN Darlington



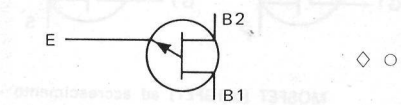
Transistore NPN Schottky



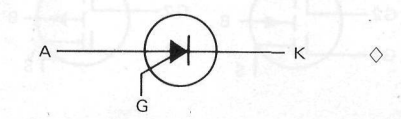
Transistore unigiunzione (UJT) con base n



Transistore unigiunzione con base p



Transistore unigiunzione programmabile (PUT)

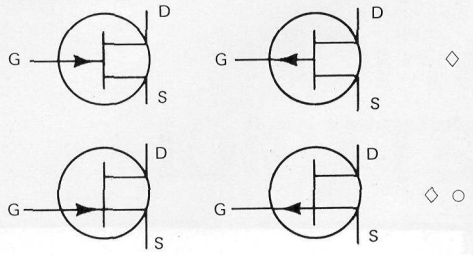


△ = convenzione IEEE/ANSI

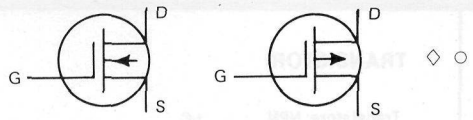
TRANSISTORI AD EFFETTO DI CAMPO (FET)

Canale n **Canale p**

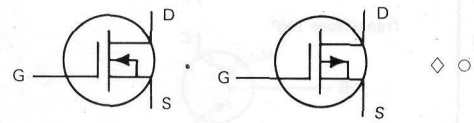
FET a giunzione (JFET)



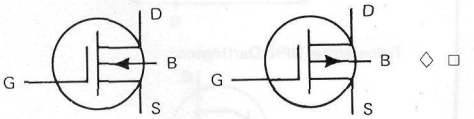
MOSFET (o IGFET) a svuotamento - tre terminali



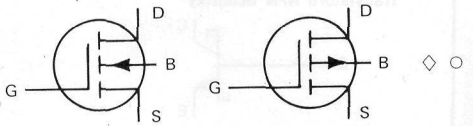
MOSFET (o IGFET) a svuotamento - tre terminali - substrato connesso al source



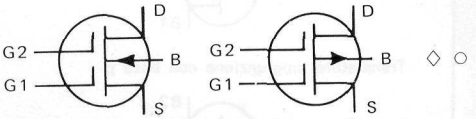
MOSFET (o IGFET) a svuotamento a quattro terminali



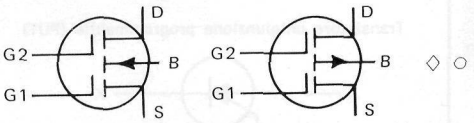
MOSFET (o IGFET) ad accrescimento - quattro terminali



MOSFET (o IGFET) a svuotamento - cinque terminali - doppia porta



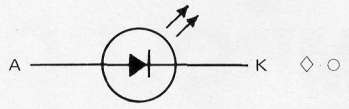
MOSFET (o IGFET) ad accrescimento - cinque terminali - doppia porta



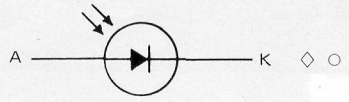
COMPONENTI OPTOELETTRONICI

DIODI

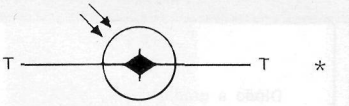
Diodo emettitore di luce (LED)



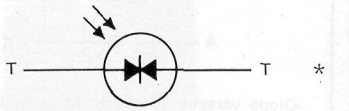
Fotodiodo



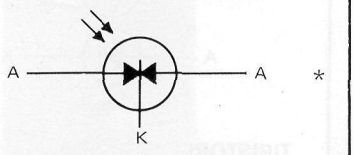
Fotodiodo bidirezionale (NPN)



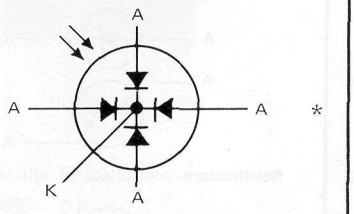
Fotodiodo bidirezionale (PNP)



Fotodiodo a due segmenti con catodo comune (PNP)

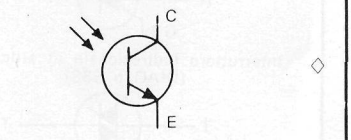


Fotodiodo quadruplo con catodo comune (PNP)



TRANSISTORI

Fototransistore NPN con collegamento di base



Fototransistore con collegamento di base

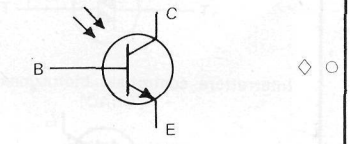
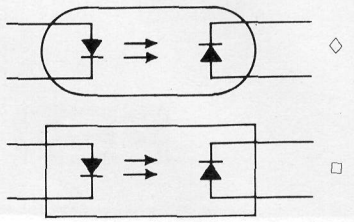
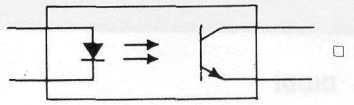


FOTO ISOLATORI (o fotodisgiuntori o opto-coupler)

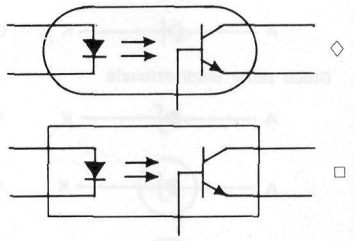
Uscita a fotodiodo



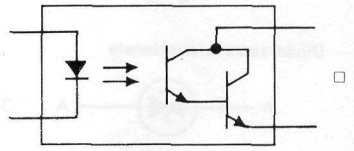
Uscita a fototransistori senza collegamento di base



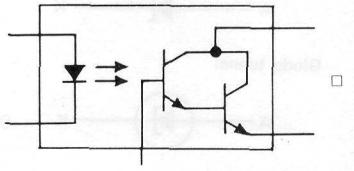
Uscita a fototransistore con collegamento di base



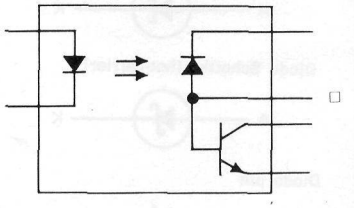
Uscita a foto-Darlington, senza collegamento di base



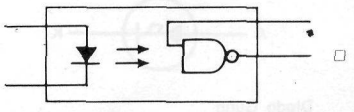
Uscita a foto-Darlington, con collegamento di base



Uscita a fotodiodo e transistore amplificatore



Uscita a porta NAND fotosensibile



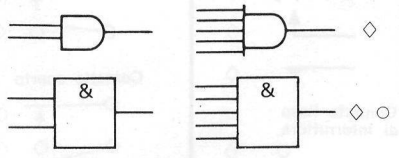
★ = convenzione IEC ✱ = proposta di revisione IEEE □ = di uso comune nell'industria

COMPONENTI LOGICI A DUE STATI

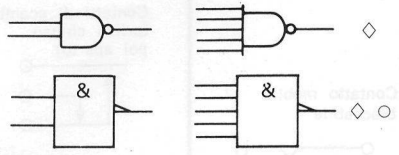
PORTE

A due ingressi **A più ingressi**

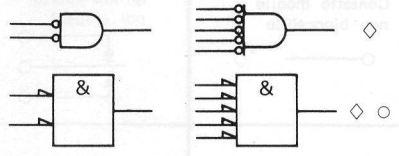
Porta AND



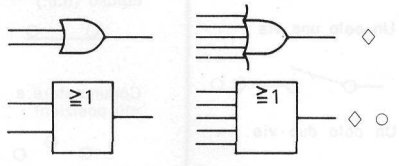
Porta NAND (uscita negata)



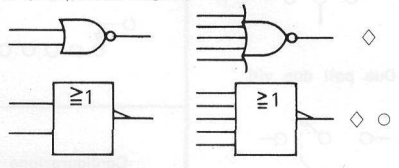
Porta NAND (ingressi negati)



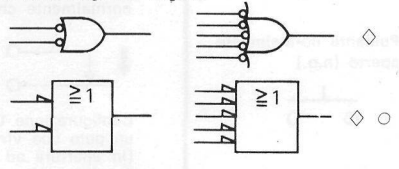
Porta OR



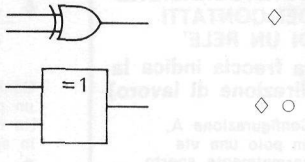
Porta NOR (uscita negata)



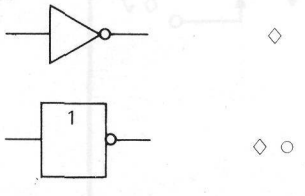
Porta NOR (ingressi negati)



Porta OR esclusivo

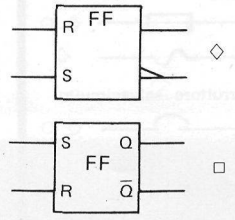


Porta invertente

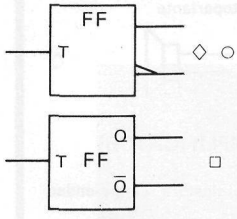


FLIP-FLOP (BISTABILI)

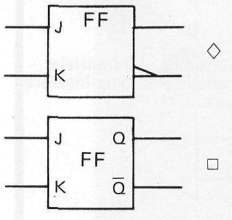
Flip-Flop R-S (SET-RESET)



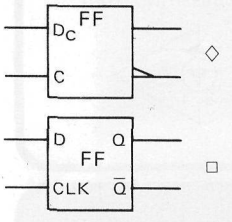
Flip-Flop tipo T o di complemento



Flip-Flop J-K

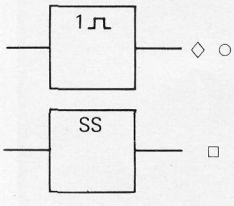


Flip-Flop tipo D

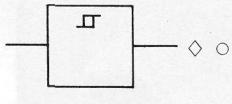


MULTIVIBRATORE MONOSTABILE

Monostabile («one shot»)



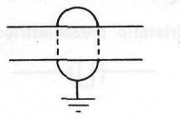
TRIGGER DI SCHMITT



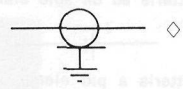
LINEE DI TRASMISSIONE

CAVI

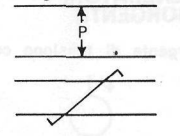
Cavo a due conduttori con schermo a massa



Cavo coassiale con schermo a massa



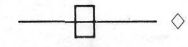
Coppia di conduttori attorcigliati



GUIDE D'ONDA

Guida d'onda circolare

Guida d'onda rettangolare



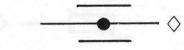
Guida d'onda flessibile

Guida d'onda attorcigliata

STRIPLINE

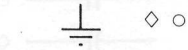
Stripline sbilanciata

Stripline bilanciata

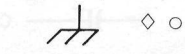


TERRA

Collegamento a terra



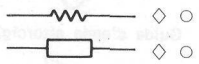
Collegamento a massa telaio



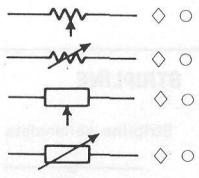
COMPONENTI DISCRETI FONDAMENTALI

RESISTORI

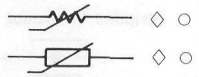
Resistore di valore fisso



Resistore variabile

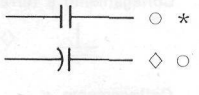


Variatore (resistore sensibile alla tensione)



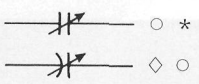
CONDENSATORI

Condensatore di valore fisso



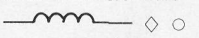
Condensatore elettrolitico

Condensatore variabile

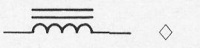


INDUTTANZE

Induttanza di valore fisso



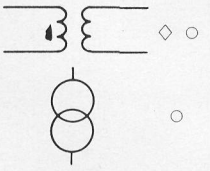
Induttanza di valore fisso con nucleo magnetico



Induttanza variabile

TRASFORMATORI

Trasformatore

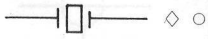


Trasformatore con nucleo magnetico

Trasformatore schermato con nucleo magnetico

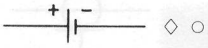
CRISTALLI

Cristallo piezoelettrico

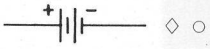


BATTERIE

Batteria ad un solo elemento

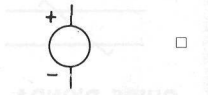


Batteria a più elementi

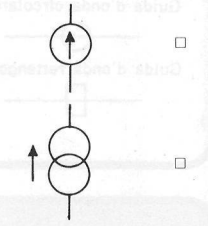


GENERATORI (SORGENTI)

Sorgente di tensione costante



Sorgente di corrente costante

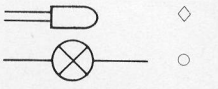


Generatore A.C.

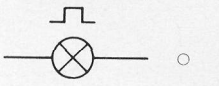
LAMPADE

Lampada ad incandescenza

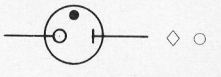
Lampada di segnalazione



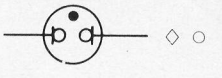
Lampada flash di segnalazione



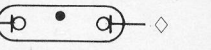
Lampada al neon per C.C.



Lampada al neon per A.C.

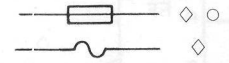


Lampada fluorescente

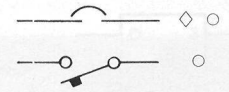


PROTEZIONI

Fusibile

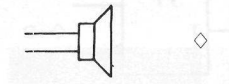


Interruttore salvacircuito



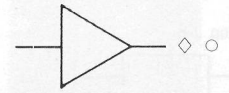
COMPONENTI AUDIO

Altoparlante

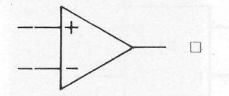


AMPLIFICATORI

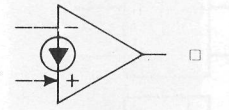
Amplificatore single-ended



Amplificatore differenziale (comparatore o amplificatore operazionale)



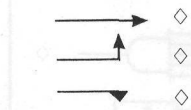
Amplificatore differenziale di corrente (NORTON)



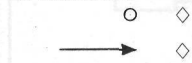
CONTATTI, INTERRUTTORI E RELE'

CONTATTI

Contatto fisso di relè



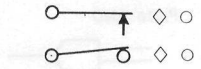
Contatto fisso di interruttore



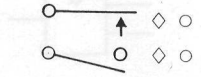
Contatto mobile bloccabile

Contatto mobile non bloccabile

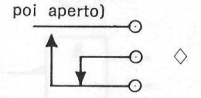
Contatto chiuso



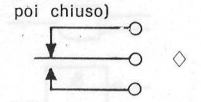
Contatto aperto



Contatti di scambio (prima chiuso poi aperto)



Contatti di scambio (prima aperto poi chiuso)



INTERRUTTORI

Un polo una via

Un polo due vie

Due poli due vie

Pulsante normalmente aperto (n.o.)

Pulsante normalmente chiuso (n.c.)

Commutatore a più posizioni

CONFIGURAZIONE DEI CONTATTI DI UN RELE'

(la freccia indica la direzione di lavoro)

Configurazione A, un polo una via normalmente aperto

Configurazione B, un polo una via normalmente chiuso

Configurazione C, un polo due vie (in apertura ed in chiusura)

Configurazione D, un polo due vie (in chiusura ed in apertura)