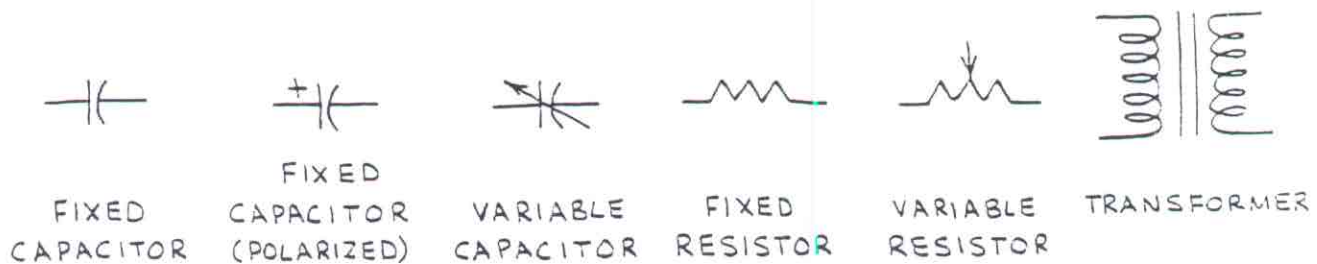
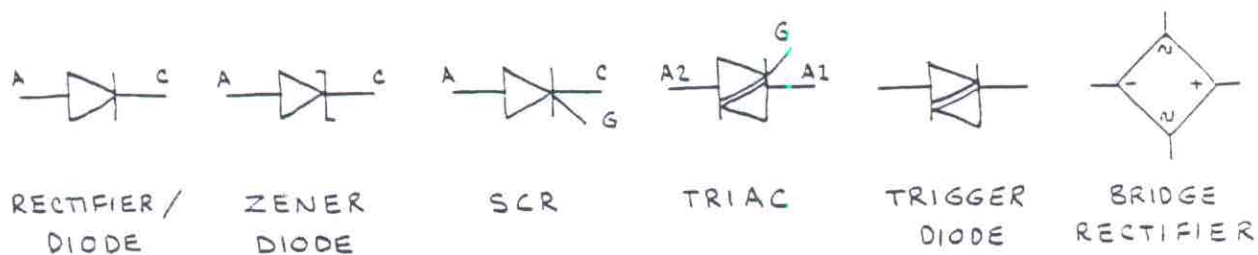


COMMON CIRCUIT SYMBOLS

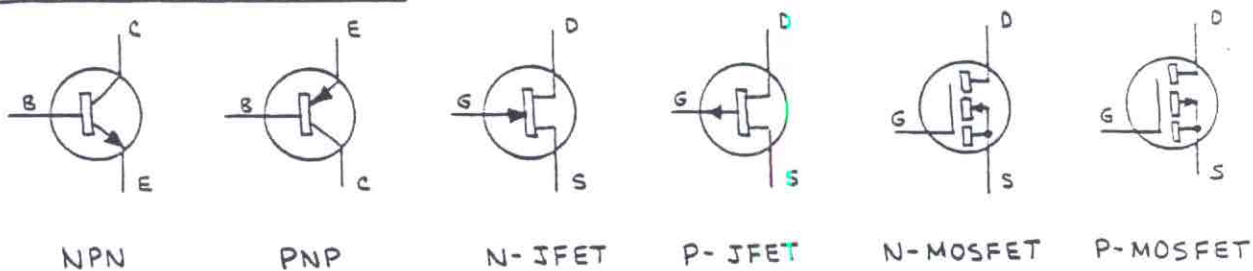
PASSIVE COMPONENTS:



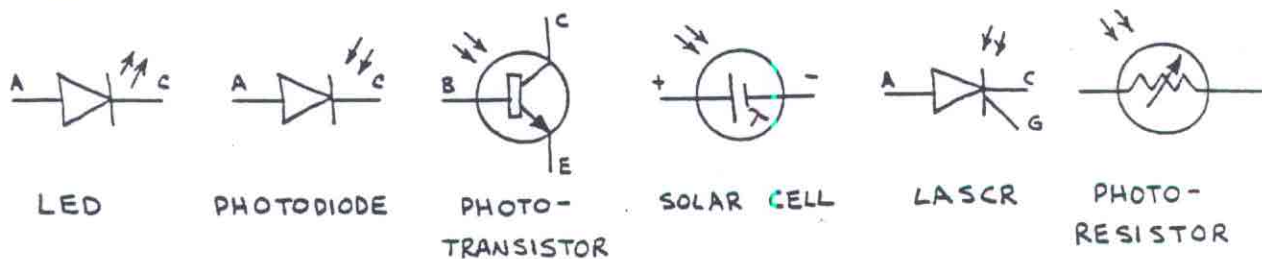
DIODES AND THYRISTORS:



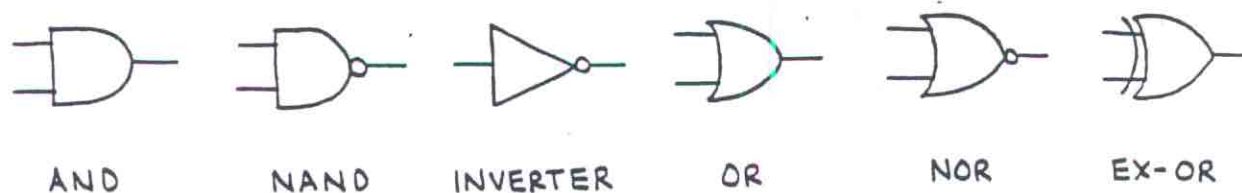
TRANSISTORS:



PHOTONIC COMPONENTS:

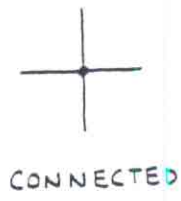
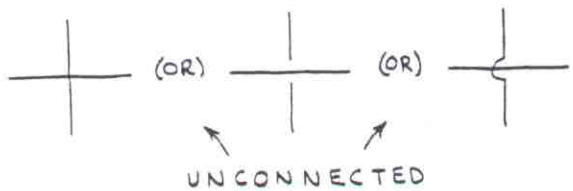


LOGIC GATES:



COMMON CIRCUIT SYMBOLS

WIRING:

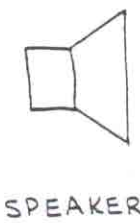
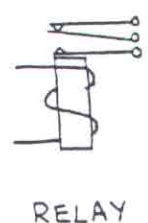


SWITCHES:

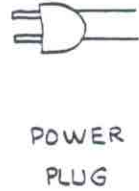
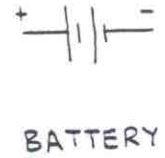
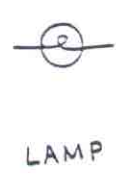
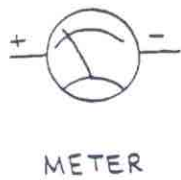


OUTPUT

DEVICES:



MISCELLANEOUS:



ABBREVIATIONS:

A = AMPERE R = RESISTANCE
 F = FARAD V = VOLT
 I = CURRENT W = WATT
 P = POWER Ω = OHM

M (MEG-) = × 1,000,000
 K (KILO-) = × 1,000
 m (MILLI-) = .001
 μ (MICRO-) = .000001
 n (nano) = .000000001
 p (pico) = .000000000001

RESISTOR COLOR CODE:



BLACK	0	0	×	1
BROWN	1	1	×	10
RED	2	2	×	100
ORANGE	3	3	×	1,000
YELLOW	4	4	×	10,000
GREEN	5	5	×	100,000
BLUE	6	6	×	1,000,000
VIOLET	7	7	×	10,000,000
GRAY	8	8	×	100,000,000
WHITE	9	9		

OHM'S LAW:

$V = IR$ $R = V/I$
 $I = V/R$ $P = VI$ (or) $I^2 R$

FOURTH BAND INDICATES ACCURACY
 (GOLD = ± 5%, SILVER = ± 10%,
 NO FOURTH BAND = ± 20%.)