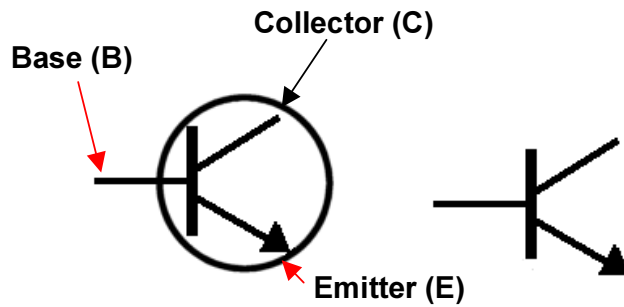


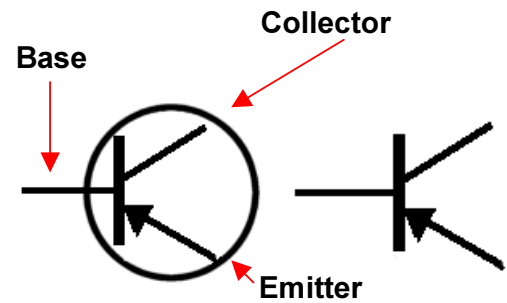
Silicon and germanium transistors
(often marked with Q1, Q2 etc, in schematics)

Pinouts; Collector = C, Base = B, Emitter = E

NPN (N)

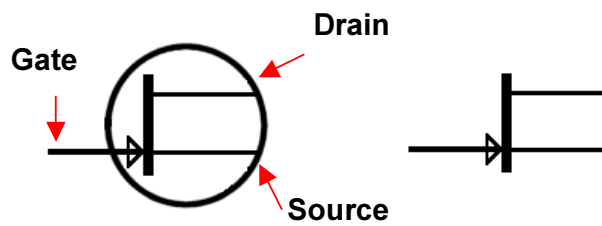


PNP (P)

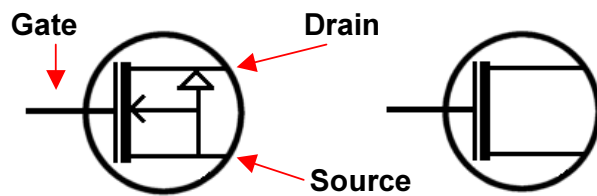


JFET transistors (N-channel)

Pinouts; Drain = D, Gate = G, Source = S



MOSFET transistor (n-channel)



What they look like;

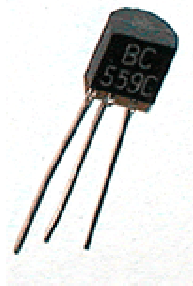
germanium (ge)

germanium with heatsink

“older” silicon (metal can)



“modern” silicon, mosfet, jfet



This is the pinout (how you “read” them);

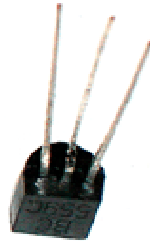
1 2 3



1 2 3



1 2 3



Transistors - Bipolar Silicon

"A", "B" or "C" digit at the end means; "A" = low gain, "B" = medium gain, "C" = high gain **Example; BC108B**

	1	2	3
BC108 NPN (metal can)	E	B	C
BC109 NPN (metal can)	E	B	C
BC169 NPN	B	C	E
MPSA13 NPN Darlington NPN	C	B	E
MPSA18 NPN	C	B	E
2N2222 NPN (metal can)	E	B	C
2N3391 NPN	B	C	E
2N3392 NPN	B	C	E
2N3565 NPN	E	B	C
2N3904 NPN	C	B	E
2N3906 PNP	C	B	E
2N4124 NPN	C	B	E
2N4125 PNP	C	B	E
2N4401 NPN	C	B	E
2N4402 PNP	C	B	E
2N5087 PNP	C	B	E
2N5088 NPN	C	B	E
2N5089 NPN	C	B	E
2N5129 NPN	E	B	C
2N5139 PNP	E	B	C
2N5306 Darlington NPN	B	C	E
2N5308 Darlington NPN	B	C	E

Transistors - FETs and MOSFETs

"A", "B" or "C" digit at the end means; "A" = low gain, "B" = medium gain, "C" = high gain **Example; BF244A**

BF244 FET	D	G	S
BF245 FET	D	S	G
BS170 MOSFET	S	G	D
J201 FET	G	S	D
MPF102 FET	G	S	D
2N5457 FET	G	S	D
2N5458 FET	G	S	D
2N5460 P-channel FET	G	D	S
2N5485 FET	G	S	D
2N5952 FET	D	S	G
2N7000 FET	D	G	S