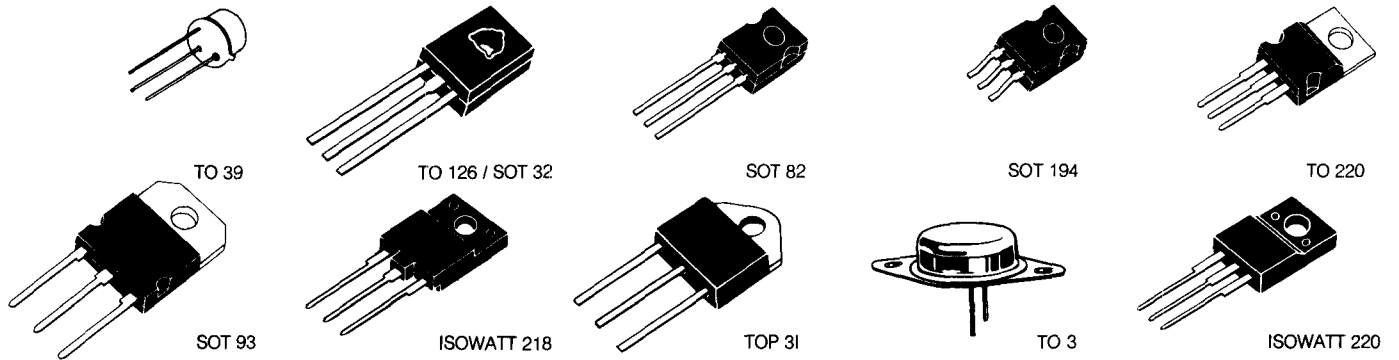


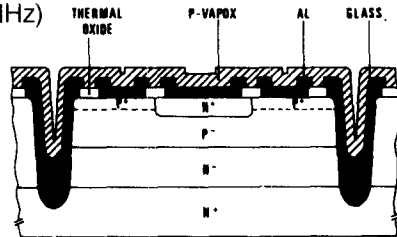
POWER BIPOLAR



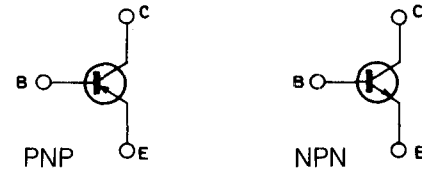
EPITAXIAL BASE TRANSISTORS

Epitaxial base - $I_{CM} : 1 \rightarrow 3 \text{ A}$, $V_{CEO} : 22 \rightarrow 100 \text{ V}$

NPN and PNP types (perfect complementary pairs)
Medium V_{CEO} range (22 to 100 V)
Medium switching speed
Medium f_T (2 to 20 MHz)
High ruggedness



Internal schematic diagrams



I _C (A)	V _{CB0} (V)	V _{CEO} (V)	P _{tot} (W)	Package	Type		h _{FE} @ I _C / V _{CE}			V _{CEsat} @ I _C / I _B		
					NPN	PNP	min	(A)	(V)	(V)	(A)	(mA)
1	40	40	30	TO 126	2N 4921	2N 4918	30	0.5	1	0.6	1	100
1	40	40	30	TO 220	TIP 29	TIP 30	15	1	4	0.7	1	125
1	60	60	30	TO 126	2N 4922	2N 4919	30	0.5	1	0.6	1	100
1	60	60	30	TO 220	TIP 29 A	TIP 30 A	15	1	4	0.7	1	125
1	80	80	30	TO 126	2N 4923	2N 4920	30	0.5	1	0.6	1	100
1	80	80	30	TO 220	TIP 29 B	TIP 30 B	15	1	4	0.7	1	125
1	100	100	30	TO 220	TIP 29 C	TIP 30 C	15	1	4	0.7	1	125
2	45	45	25	TO 126	BD 233	BD 234	25	1	2	0.6	1	100
2	55	45	30	TO 220	BD 239	BD 240	15	1	4	0.7	1	200
2	60	60	25	TO 126	BD 235	BD 236	25	1	2	0.6	1	100
2	70	60	30	TO 220	BD 239 A	BD 240 A	15	1	4	0.7	1	200
2	90	80	30	TO 220	BD 239 B	BD 240 B	15	1	4	0.7	1	200
2	100	80	25	TO 126	BD 237	BD 238	25	1	2	0.6	1	100
2	115	100	30	TO 220	BD 239 C	BD 240 C	15	1	4	0.7	1	200
3	30	30	25	TO 126	MJE 520	MJE 370	25	1	1	—	—	—
3	40	40	40	TO 220	TIP 31	TIP 32	25	1	4	1.2	3	375
3	45	45	30	TO 126	BD 175	BD 176	40	0.15	2	0.8	1	100
3	45	45	30	TO 126	BD 175-10	BD 176-10	63	0.15	2	0.8	1	100
3	45	45	30	TO 126	BD 175-16	BD 176-16	100	0.15	2	0.8	1	100
3	45	45	30	TO 126	BD 175-6	BD 176-6	40	0.15	2	0.8	1	100
3	55	45	40	TO 220	BD 241	BD 242	25	1	4	1.2	3	600
3	60	60	30	TO 126	BD 177	BD 178	40	0.15	2	0.8	1	100
3	60	60	30	TO 126	BD 177-10	BD 178-10	63	0.15	2	0.8	1	100
3	60	60	30	TO 126	BD 177-6	BD 178-6	40	0.15	2	0.8	1	100
3	60	60	40	TO 220	TIP 31 A	TIP 32 A	25	1	4	1.2	3	375
3	70	60	40	TO 220	BD 241 A	BD 242 A	25	1	4	1.2	3	600
3	80	80	30	TO 126	BD 179	BD 180	40	0.15	2	0.8	1	100
3	80	80	30	TO 126	BD 179-10	BD 180-10	63	0.15	2	0.8	1	100