

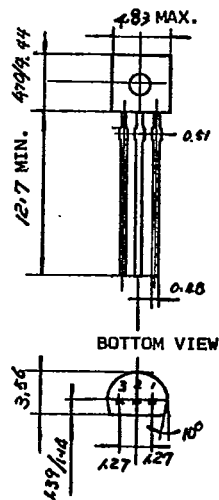
RF-IF High Frequency Transistors

TYPE NO.	POLARITY	CASE	MAXIMUM RATINGS			H_{FE}				$V_{CE(SAT)}$		f_T min (MHz)	C_{ob} max (pF)	N.F. max (dB)
			P_d (mW)	I_C (mA)	V_{CEO} (V)	min	max	I_C (mA)	V_{CE} (V)	max (V)	I_C (mA)			
BF 115	N	TO-72J	165	30	30	48	167	1	10	—	—	230+	0.8 •	3.5+
BF 152	N	TO-106	200	—	12	20	—	3	10	0.5	10	600	1.2	—
BF 153	N	TO-106	200	—	12	20	—	3	6	0.5	10	300	1.2	—
BF 155	N	TO-72G	200	20	40	20	—	2.5	12	0.3	10	400	0.4+ •	9
BF 158	N	TO-106	200	50	12	20	—	4	10	0.5	10	700+	1.2 •	3.5
BF 159	N	TO-106	200	50	20	20	—	4	10	0.5	10	700+	1.2 •	3.5
BF 160	N	TO-106	200	50	12	20	—	3	10	0.5	10	400	1.2 •	3.5
BF 167	N	TO-72J	150	25	30	27	—	4	10	0.95	10	300+	—	—
BF 173	N	TO-72J	260	25	25	38	—	7	10	—	—	350	0.3 •	—
BF 180	N	TO-72G	150	20	20	45	—	2	10	—	—	675+	3.5	—
BF 181	N	TO-72G	150	20	20	20	—	2	10	—	—	600+	0.9+	—
BF 182	N	TO-72G	150	20	20	10	—	2	10	—	—	600+	1	7.4+
BF 183	N	TO-72G	150	20	20	10	—	3	10	—	—	800+	1+	—
BF 184	N	TO-72J	165	30	20	67	220	1	10	—	—	260+	0.9 •	4
BF 185	N	TO-72J	165	30	20	36	125	1	10	—	—	200+	0.9 •	4
BF 199	N	TO-92E	360	25	25	38	—	7	10	—	—	550+	0.32+ •	—
BF 200	N	TO-72G	150	20	20	15	—	2	10	—	—	500+	0.5 •	5
BF 224	N	TO-92E	360	50	30	30	—	7	10	0.15	10	300	0.3+ •	4
BF 240	N	TO-92E	300	25	40	67	200	1	10	—	—	430+	0.34 •	3.5
BF 241	N	TO-92E	300	25	40	36	125	1	10	—	—	400+	0.34 •	3.5
BF 253	N	TO-92E	300	30	30	40	350 #	1	10	—	—	150	0.7+ •	1.5
BF 254	N	TO-92E	300	30	20	67	220	1	10	0.1+	10	260+	0.85+ •	4
BF 255	N	TO-92E	300	30	20	36	125	1	10	0.1+	10	200+	0.85+ •	4
BF 271	N	TO-72J	250	25	25	30	—	10	10	0.13+	10	500+	0.22+ •	—
BF 310	N	TO-92F	300	25	30	29	—	4	10	—	—	300+	1.6	—
BF 311	N	TO-92E	300	25	25	40	—	15	10	—	—	750+	0.35 •	—
BF 314	N	TO-92F	300	25	30	29	—	4	10	—	—	450+	0.13 •	—
BF 368	N	TO-92A	310	50	15	35	125	1	10	0.4	10	250	1.7	—
BF 369	N	TO-92A	310	50	20	70	220	1	10	0.4	10	400	1.7	—
BF 494	N	TO-92E	300	30	20	67	220	1	10	0.1+	10	260+	0.85+ •	4+
BF 495	N	TO-92E	300	30	20	36	125	1	10	0.1+	10	200+	0.85+ •	4+
BF 594	N	TO-92E	250	30	25	65	220	1	10	—	—	260+	0.6+ •	1.4+
BF 595	N	TO-92E	250	30	25	35	125	1	10	—	—	260+	0.6+ •	1.4+
BF 597	N	TO-92E	360	25	25	38	—	7	10	—	—	550+	0.3+ •	—
BFS 62	N	TO-72G	200	25	25	35	—	7	10	—	—	580	0.33 •	4
BFW 41	N	TO-72G	200	—	15	40	80	3	1	0.4	10	600	3	4
BFW 68	N	TO-18	360	—	40	40	—	10	1	0.15	10	250	4	6
BFW 70	N	TO-72G	240	—	30	30	—	10	10	—	—	750	1.6+	2.6+
BFX 60	N	TO-72G	230	25	25	50	—	7	10	—	—	400	0.3 •	5+
BFX 73	N	TO-72G	200	50	15	20	—	3	1	0.4	10	600	1.7	6
BFX 89	N	TO-72G	25	15	20	20	150	2	1	—	—	1000+	1.7	4
BFY 74	N	TO-18	360	100	45	40	180	10	5	1	10	250	4	—
BFY 75	N	TO-18	360	100	45	65	300	10	5	1	10	250	4	—
BFY 78	N	TO-18	300	50	12	20	—	3	1	0.4	10	500	2.8	6
BFY 79	N	TO-72G	300	—	30	30	—	4	10	—	—	400	1.6	5.5
BFY 88	N	TO-72J	175	25	25	40	—	5	1	—	—	750	0.28 •	4
KM 9016	N	TO-92A	300	50	20	28	198 #	1	5	0.5	10	500	1.6	3
KM 9018	N	TO-92A	300	50	15	28	198 #	1	5	0.5	10	400	1.7	—

+ Typical value # H_{FE} groupings available

Mechanical Outlines

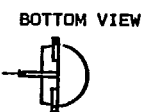
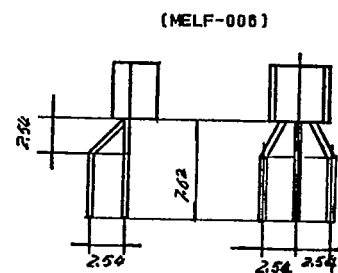
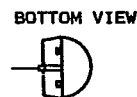
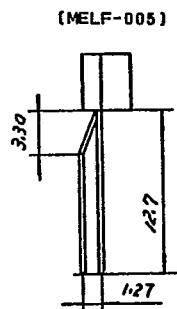
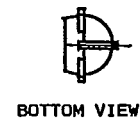
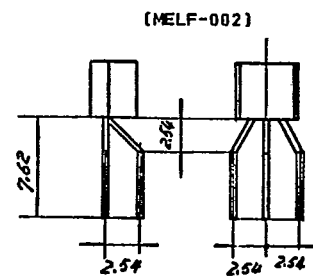
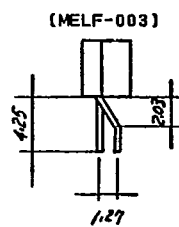
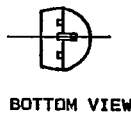
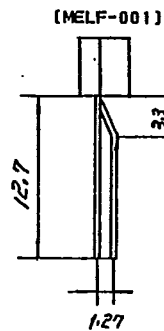
TO-92



LEAD CODE	1	2	3
A	E	B	C
B	E	C	B
C	B	E	C
D	B	C	E
E*	C	E	B
F*	C	B	E
BA*	K	A	G
BF*	A	G	K
DA	B	G	D
DB	B	D	G
DC	D	G	B
DD	D	B	G
DE*	G	B	D
DF*	G	D	B
VOLTAGE REGULATOR			
D	O	G	L

*ALL LEAD FORM TO MELF-001
UNLESS OTHERWISE NOTED.

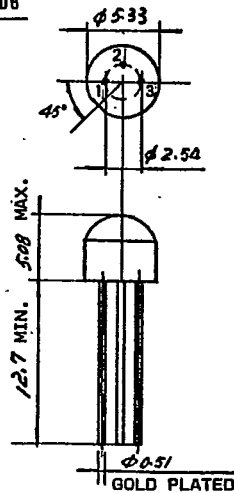
TO-92 LEAD FORM



ALL DIMENSIONS IN mm

Mechanical Outlines

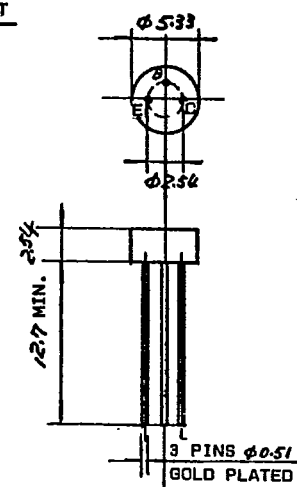
TO-106



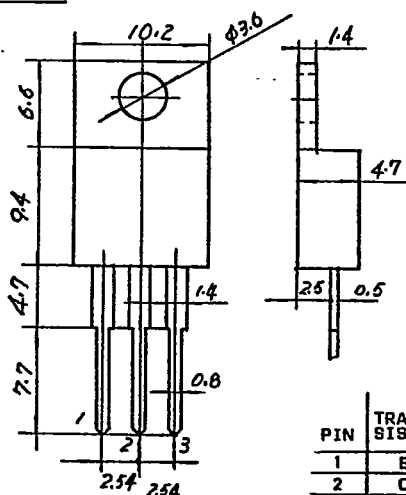
LEAD CODE	1	2	3
PUT	K	G	A
A	E	B	C
B	B	E	C

ALL TRANSISTORS IN TO-106 ARE OF LEAD CODE A UNLESS OTHERWISE SPECIFIED

TO-106 FLAT

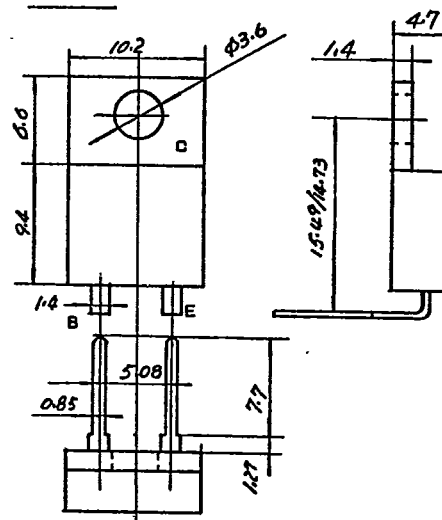


TO-220B

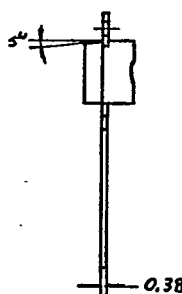
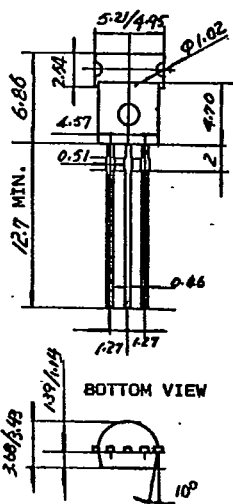


PIN	TRANSISTOR	VOLTAGE REGULATOR I.C.
1	E	INPUT
2	C	GROUND
3	B	OUTPUT

TO-220A



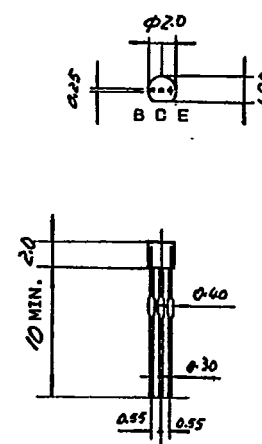
TO-237



*LEAD CODE SAME AS TO-92

**TO-92 LEAD FORM MELF-002, MELF-006 ARE ALSO APPLIED FOR TO-237

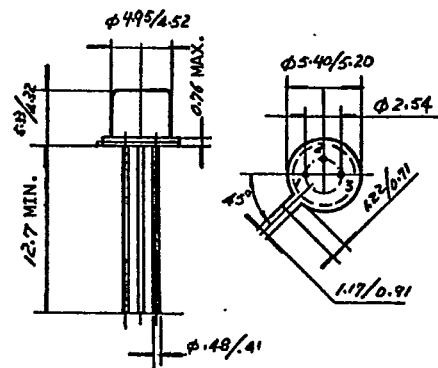
MT-42



ALL DIMENSIONS IN mm

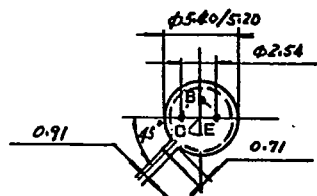
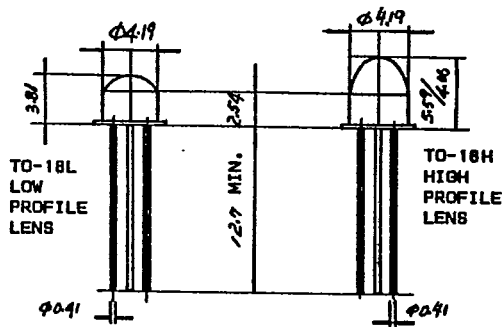
Mechanical Outlines

TO-18

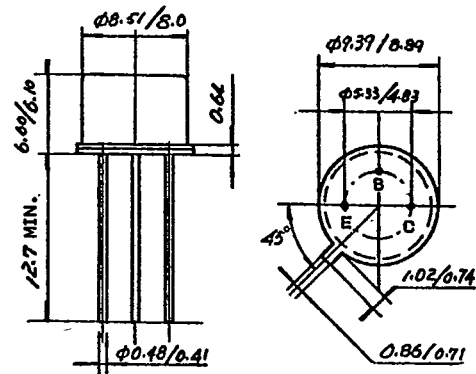


LEAD CODE	1	2	3
TRANSISTOR	E	B	C
FET	B	D	G

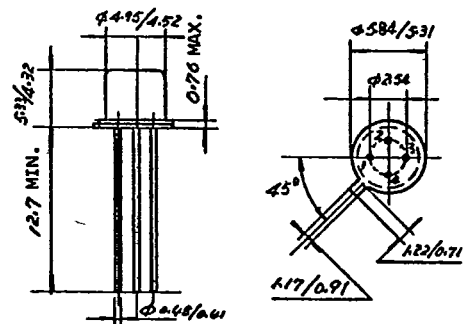
TO-18 PHOTO TRANSISTOR



TO-30

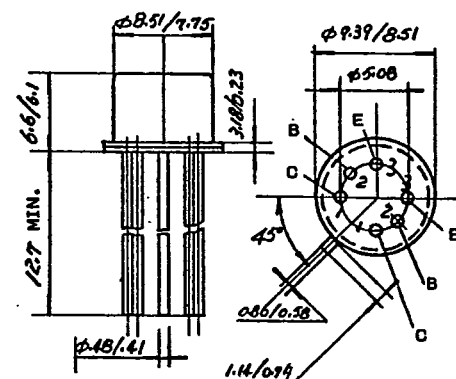


TO-72



LEAD CODE	1	2	3	4
SCS	K	GK	GA	A
J	B	E	C	CASE
G	E	B	C	CASE
DH	B	D	G	CASE

TO-78



ALL DIMENSIONS IN mm