

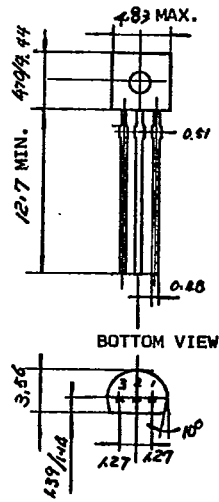
Low Level and General Purpose Amplifiers

TYPE NO.	POLARITY	CASE	MAXIMUM RATINGS			H_{FE}				$V_{CE(SAT)}$		f_T min (MHz)	Cob 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)			
BC 107	N	TO-18	300	100	45	110	450 #	2	5	0.6	100	150	6	10
BC 108	N	TO-18	300	100	20	110	800 #	2	5	0.6	100	150	6	10
BC 109	N	TO-18	300	100	20	110	800 #	2	5	0.6	100	150	6	4
BC 110	N	TO-18	300	50	80	30	—	2	5	0.6	50	100+	5	—
BC 113	N	TO-106	200	50	25	200	1000	1	5	0.35	1	60	4	3
BC 114	N	TO-106	200	50	25	200	1000	1	5	0.35	1	70	4	3
BC 132	N	TO-106	200	50	25	60	300	1	10	0.35	1	40	4	—
BC 147	N	TO-92F	350	100	45	100	450 #	2	5	0.6	100	200+	4.5	10
BC 148	N	TO-92F	350	100	20	110	800 #	2	5	0.6	100	200+	4.5	10
BC 149	N	TO-92F	350	100	20	200	800 #	2	5	0.6	100	200+	4.5	10
BC 135	P	TO-106	200	100	40	50	—	10	5	0.25	10	70+	4+	1+
BC 154	P	TO-106	200	100	40	160	—	10	5	0.25	10	70+	4+	2.5
BC 157	P	TO-92F	350	100	45	110	450 #	2	5	0.3	10	150+	3.5+	10
BC 158	P	TO-92F	350	100	25	110	800 #	2	5	0.3	10	150+	3.5+	10
BC 159	P	TO-92F	350	100	20	200	800 #	2	5	0.3	10	150+	3.5+	4
BC 167	N	TO-92B	300	100	45	110	450 #	2	5	0.6	100	150	4.5	10
BC 168	N	TO-92B	300	100	20	110	800 #	2	5	0.6	100	150	4.5	10
BC 169	N	TO-92B	300	100	20	200	800 #	2	5	0.6	100	150+	4.5	4
BC 170	N	TO-92F	300	100	20	36	600 #	1	1	0.25	1	100+	4+	10
BC 171	N	TO-92F	300	100	45	125	600 ▲ #	2	5	0.6	100	150	6	10
BC 172	N	TO-92F	300	100	25	125	900 ▲ #	2	5	0.6	100	150	6	10
BC 173	N	TO-92F	300	100	25	125	900 ▲ #	2	5	0.6	100	150	6	10
BC 174	N	TO-92F	300	100	64	110	800 #	2	5	0.6	100	150	10	10
BC 177	P	TO-18	300	100	45	70	450 #	2	5	0.3	10	150	7	10
BC 178	P	TO-18	300	100	25	70	800 #	2	5	0.3	10	100	7	10
BC 179	P	TO-18	300	100	25	200	800 #	2	5	0.3	10	100	7	4
BC 181	P	TO-92F	300	200	25	60	—	2.5	5	0.25	50	150+	4.7+	—
BC 182	N	TO-92F	300	200	50	110	450 #	2	5	0.6	400	150	5	10
BC 182L	N	TO-92B	300	200	50	110	450 #	2	5	0.6	100	150	5	10
BC 183	N	TO-92F	300	200	30	110	800 #	2	5	0.6	100	150	5	10
BC 183L	N	TO-92B	300	200	30	110	800 #	2	5	0.6	100	150	5	10
BC 184	N	TO-92F	300	200	30	200	800 #	2	5	0.6	100	150	5	4
BC 184L	N	TO-92B	300	200	30	200	800 #	2	5	0.6	100	150	5	4
BC 186	P	TO-18	300	100	25	40	200	2	5	0.5	50	50	—	10
BC 187	P	TO-18	300	100	25	100	500	2	5	0.5	50	150+	3.5+	10
BC 190	N	TO-18	300	100	64	125	500 #	2	5	0.6	100	200+	6	10
BC 192	P	TO-18	400	500	25	60	180	50	5	0.25	50	100	12	—
BC 204	P	TO-106	300	100	45	70	450 #	2	5	0.3	10	100	4	10
BC 205	P	TO-106	300	100	20	70	800 #	2	5	0.3	10	100	4	10
BC 206	P	TO-106	300	100	20	200	800 #	2	5	0.3	10	100	4	4
BC 207	N	TO-106	300	100	45	110	450 #	2	5	0.6	100	150	6	10
BC 208	N	TO-106	300	100	25	110	800 #	2	5	0.6	100	150	6	10
BC 209	N	TO-106	300	100	25	200	800 #	2	5	0.6	100	150	6	4
BC 212	P	TO-92F	300	200	50	100	400 ▲ #	2	5	0.6	100	100	10	10
BC 212L	P	TO-92B	300	200	50	100	400 ▲ #	2	5	0.6	100	100	10	10
BC 213	P	TO-92F	300	200	30	100	600 ▲ #	2	5	0.6	100	100	10	10
BC 213L	P	TO-92B	300	200	30	100	600 ▲ #	2	5	0.6	100	100	10	10
BC 214	P	TO-92F	300	200	30	200	600 ▲ #	2	5	0.6	150	150	10	2
BC 214L	P	TO-92B	300	200	30	200	600 ▲ #	2	5	0.6	100	150	10	2
BC 224	P	TO-92B	250	30	30	150	450	1	5	0.7	10	150+	3.5+	—
BC 225	P	TO-106	200	100	40	90	—	10	5	0.25	10	100	8	—
BC 237	N	TO-92F	300	100	45	110	450 #	2	5	0.6	100	150	4.5	10
BC 238	N	TO-92F	300	100	20	110	800 #	2	5	0.6	100	150	4.5	10
BC 239	N	TO-92F	300	100	20	200	800 #	2	5	0.6	100	150	4.5	4
BC 250	P	TO-92F	300	100	20	35	600 #	1	1	0.4+	30	100	6	—

* H_{FE} groupings available ▲ hfe @ 1 KHz + Typical value

Mechanical Outlines

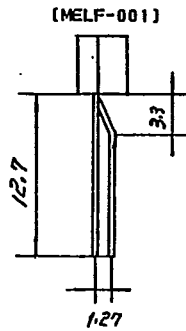
TO-92



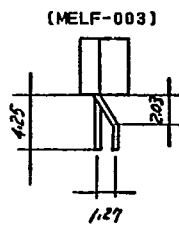
LEAD CODE	1	2	3
A	E	B	C
B	E	C	B
C	B	E	C
D	B	C	E
E*	C	E	B
F*	C	B	E
BA*	K	A	G
BF*	A	G	K
DA	B	G	D
DB	B	D	G
DC	D	G	B
DD	D	G	B
DE*	G	B	D
DF*	G	D	B
VOLTAGE REGULATOR			
D	O	G	L

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

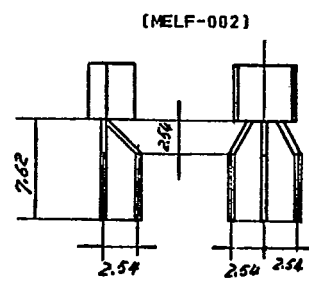
TO-92 LEAD FORM



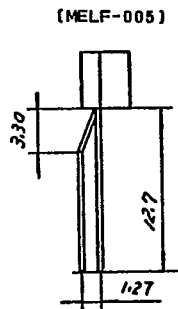
BOTTOM VIEW



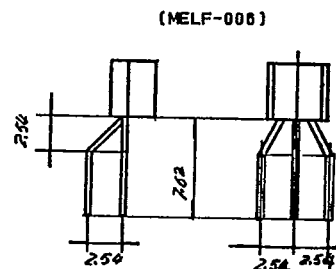
BOTTOM VIEW



BOTTOM VIEW



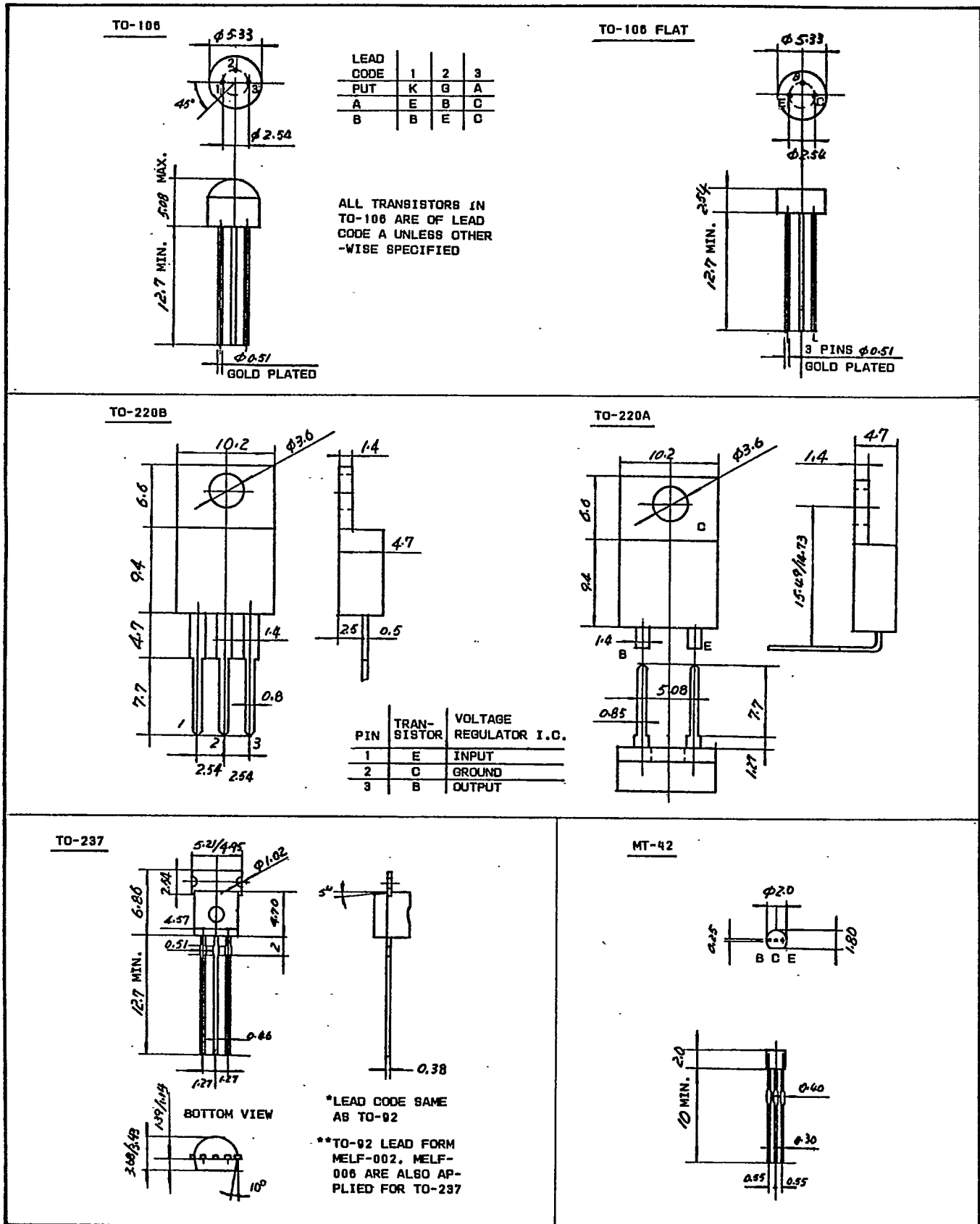
BOTTOM VIEW



BOTTOM VIEW

ALL DIMENSIONS IN mm

Mechanical Outlines



ALL DIMENSIONS IN mm

Mechanical Outlines

TO-18

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

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-18 PHOTO TRANSISTOR

TO-18L LOW PROFILE LENS

TO-18H HIGH PROFILE LENS

TO-78

ALL DIMENSIONS IN mm