

Multiple Transistors

DUAL TRANSISTORS

TYPE NO.	POLARITY	CASE	MAXIMUM RATINGS			H _{FE}				ΔH _{FE} (±%)	ΔV _{BE} (±V)	V _{CE(SAT)}		f _T (MHz)	Cob (pF)	NF (dB)
			Pd (mW)	I _C (mA)	V _{CE0} (V)	min	max	I _C (mA)	V _{CE} (V)			(V) (max)	I _C (mA)			
2N 2453	N	TO-78	300	50	30	150	600	1	5	10	5	1	5	60	8	7
2N 2453A	N	TO-78	300	50	50	150	600	1	5	10	5	1	5	60	4	7
2N 2639	N	TO-78	600	30	45	50	300	0.01	5	10	5	1	5	80	8	4
2N 2640	N	TO-78	600	30	45	50	300	0.01	5	20	10	1	5	80	8	4
2N 2641	N	TO-78	600	30	45	50	300	0.01	5	—	—	1	5	80	8	4
2N 2642	N	TO-78	600	30	45	100	300	0.01	5	10	5	1	5	80	8	4
2N 2643	N	TO-78	600	30	45	100	300	0.01	5	20	10	1	5	80	8	4
2N 2644	N	TO-78	600	30	45	100	300	0.01	5	—	—	1	5	80	8	4
2N 2903	N	TO-78	300	50	30	125	625	1	5	20	10	1	5	60	8	7
2N 2903A	N	TO-78	300	50	30	125	625	1	5	10	5	1	5	60	8	7
2N 2913	N	TO-78	600	30	45	60	240	0.01	5	—	—	0.35	1	60	6	4
2N 2914	N	TO-78	600	30	45	150	600	0.01	5	—	—	0.35	1	60	6	3
2N 2915	N	TO-78	600	30	45	60	240	0.01	5	10	5	0.35	1	60	6	4
2N 2916	N	TO-78	600	30	45	150	600	0.01	5	10	5	0.35	1	60	6	3
2N 2917	N	TO-78	600	30	45	60	240	0.01	5	20	10	0.35	1	60	6	4
2N 2918	N	TO-78	600	30	45	150	600	0.01	5	20	10	0.35	1	60	6	3
2N 3347	P	TO-78	600	30	45	40	300	0.01	5	10	5	0.5	10	60	6	4
2N 3348	P	TO-78	600	30	45	40	300	0.01	5	20	10	0.5	10	60	6	4
2N 3349	P	TO-78	600	30	45	40	300	0.01	5	40	20	0.5	10	60	6	4
2N 3350	P	TO-78	600	30	45	100	300	0.01	5	10	5	0.5	10	60	6	4
2N 3351	P	TO-78	600	30	45	100	300	0.01	5	20	10	0.5	10	60	6	4
2N 3352	P	TO-78	600	30	45	100	300	0.01	5	40	20	0.5	10	60	6	4
2N 3587	N	TO-78	600	30	45	80	500	1	5	20	20	0.35	1	80	8	10
2N 3680	N	TO-78	600	30	50	150	600	0.01	5	10	3	0.7	10	60	6	3
2N 3726	P	TO-78	500	300	45	135	350	1	5	10	5	0.25	50	60	8	4
2N 3727	P	TO-78	500	300	45	135	350	1	5	10	2.5	0.25	50	60	8	4
2N 3806	P	TO-78	600	50	60	150	450	1	5	—	—	0.25	0.1	100	4	3
2N 4015	P	TO-78	500	300	60	135	350	1	5	10	5	0.25	50	60	8	4
2N 4016	P	TO-78	500	300	60	135	350	1	5	10	2.5	0.25	50	60	8	4
2N 4019	P	TO-78	600	200	45	250	500	0.01	5	—	—	0.25	10	50	6	2
2N 4020	P	TO-78	600	200	45	250	550	0.1	5	20	5	0.25	10	50	6	2
2N 4023	P	TO-78	600	200	45	250	550	0.1	5	10	3	0.25	10	50	6	2

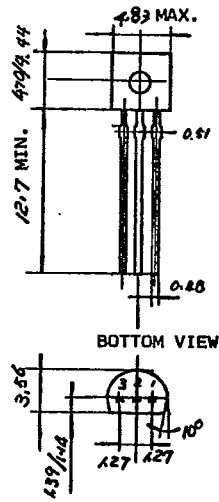
DARLINGTON TRANSISTORS

TYPE NO.	POLARITY	CASE	MAXIMUM RATINGS			H _{FE}				V _{CE(SAT)}		f _T min (MHz)	Cob max (pF)	N.F. @f = 1KHz max (dB)	COMPLE- MENTARY TYPE
			Pd (mW)	I _C (mA)	V _{CE0} (V)	min	max	I _C (mA)	V _{CE} (V)	max (V)	I _C (mA)				
BC 516	P	TO-92F	625	400	30	30K	—	20	2	1	100	250+	4.5+	15#	BC 517
BC 517	N	TO-92F	625	400	30	30K	—	20	2	1	100	200+	3.5	15#	BC 516
MPSA 12	N	TO-92A	625	500	20	20K	—	10	5	1	10	—	—	—	—
MPSA 13	N	TO-92A	500	300	30●	5K	—	10	5	1.5	100	125	3+	2+	—
MPSA 14	N	TO-92A	500	300	30●	10K	—	10	5	1.5	100	125	3+	2+	—
MPSA 63	P	TO-92A	625	300	30	10K	—	100	5	1.5	100	125	—	—	—
MPSA 65	P	TO-92A	500	300	30●	50K	—	10	5	1.5	100	100	4+	2+	—
MPSA 66	P	TO-92A	500	300	30●	75K	—	10	5	1.5	100	100	4+	2+	—
MPSD 04	N	TO-92A	625	300	25●	1K	—	10	5	1	100	100	—	—	MPSD 54
MPSD 54	P	TO-92A	625	300	25●	1K	—	10	5	1	100	100	—	—	MPSD 54
2N 997	N	TO-18	500	300	40	7K	70K	100	10	1.6	100	—	—	—	—
2N 5305	N	TO-92B	600	300	25	2K	20K	2	5	1.4	200	60	10	—	—
2N 5306	N	TO-92B	600	300	25	7K	70K	2	5	1.4	200	60	10	—	—
2N 5307	N	TO-92B	600	300	40	2K	20K	2	5	1.4	200	60	10	—	—
2N 5308	N	TO-92B	600	300	40	7K	70K	2	5	1.4	200	60	10	—	—

+ Typical value #f = WB

Mechanical Outlines

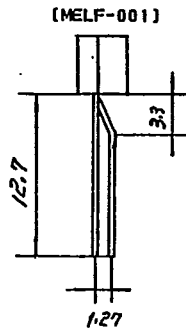
TO-92



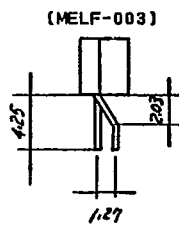
LEAD CODE	1	2	3
A	E	B	C
B	E	C	B
C	B	E	C
D	B	C	E
E*	C	E	B
F*	C	B	E
BA*	K	A	G
BF*	A	G	K
DA	B	G	D
DB	B	D	G
DC	D	G	B
DD	D	G	B
DE*	G	B	D
DF*	G	D	B
VOLTAGE REGULATOR			
D	O	G	L

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

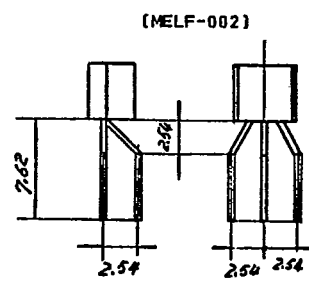
TO-92 LEAD FORM



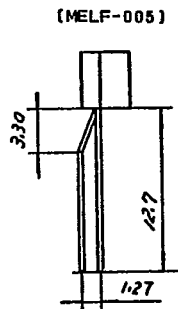
BOTTOM VIEW



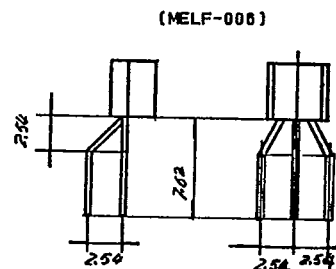
BOTTOM VIEW



BOTTOM VIEW



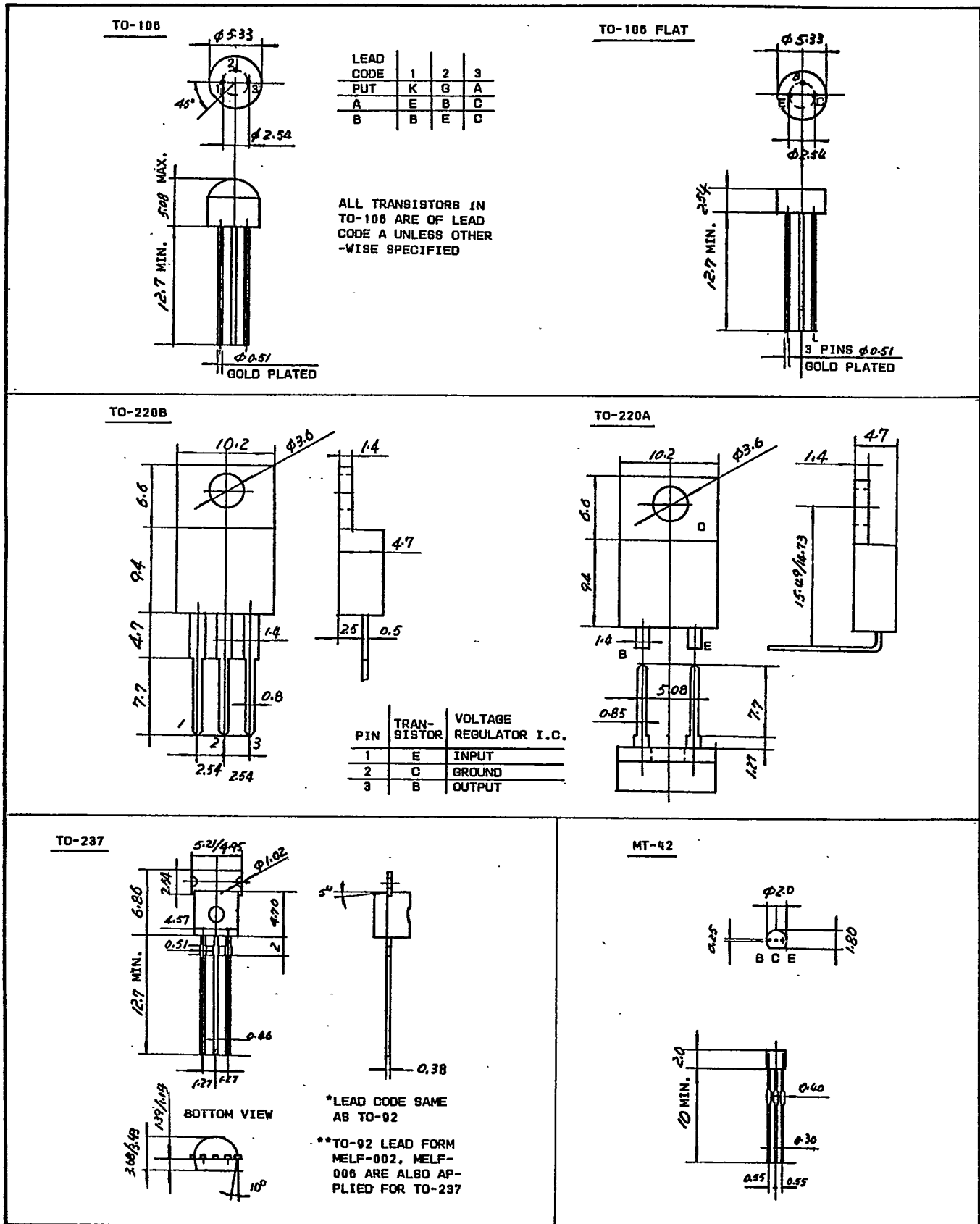
BOTTOM VIEW



BOTTOM VIEW

ALL DIMENSIONS IN mm

Mechanical Outlines



ALL DIMENSIONS IN mm

