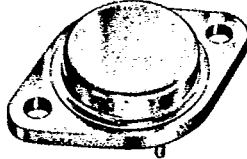






POWER CONVERSION TRANSISTORS

TELEFUNKEN electronic designs its high voltage power transistors for efficient operation in the full range of switching power supply, and switching amplifier topologies associated with 120 to 240 volt mains, and for switching rates up to 50 KHz. Notice particularly the design features of TELEFUNKEN'S TOP 3 High Voltage epoxy package used on our BUV 47 and BUV 48 (9 and 15 ampere) devices. While having the same mounting dimensions, and, lead spacing as the conventional TO 218, TELEFUNKEN electronic has designed in an additional 2 mm of lead-to-lead and lead-to-header creepage distance for improved high voltage safety and reliability.

NPN-Fast, From-the-Mains, Power Switching Transistors

Type	Maximum ratings					Characteristics								Case: Dimensions see page 8
	P_{tot} W	at T_{case} °C	I_C A	V_{CES} V	V_{CEO} V	t_f µs	I_C A	h_{FE} at I_C and V_{CE}			V_{CEsat} at I_C and h_{FE}			
BDY 45	95	≤45	15	400	250	≤1	5	≥20	2	2	≤1.5	15	3	
BDY 46	95	≤45	15	600	300	≤1	5	≥20	2	2	≤1.5	15	3	
BDY 47	95	≤45	15	750	350	≤1	5	≥20	2	2	≤1.5	15	3	
BU 526	86	≤25	8	900	400	≤1	4	≥6	4	5	≤5	8	2.6	
BU 536	50	≤25	8	1100	480	≤1	4	≥5.5	4	5	≤5	4	5.5	
BU 546	100	≤25	6	1300	550	0.3	3.2	≥8	1.5	5	≤2	3.2	5	
BUX 47	125	≤25	9	850	400	≤1	6	≥5	9	5	≤1.5	6	5	
BUX 47A	125	≤25	9	1000	450	≤0.8	5	≥5	8	5	≤1.5	5	5	
BUX 48	175	≤25	15	850	400	≤1	10	≥5	15	5	≤1.5	10	5	
BUX 48A	175	≤25	15	1000	450	≤0.8	8	≥5	12	5	≤1.5	8	5	Fig. 6
BUV 47	120	≤25	9	850	400	≤0.4	5	≥3.2	8	3	≤1.5	5	5	
BUV 47A	120	≤25	9	1000	450	≤0.4	5	≥3.2	8	3	≤1.5	5	5	
BUV 48	150	≤25	15	850	400	≤0.4	8	≥5	15	5	≤1.5	10	5	
BUV 48A	150	≤25	15	1000	450	≤0.4	8	≥5	12	5	≤1.5	8	5	Fig. 8
BUT 56	100	≤25	8	800	400	≤1	2.5	≥15	1	5	≤5	4	5.5	
BUT 56A	100	≤25	8	1000	450	≤1	2.5	≥15	1	5	≤2	3	4	
BUT 54	100	≤25	8	800	430	≤0.25	2.5	≥20	1	5	≤5	4	6	
TE 13006	80	≤25	8	600	300	≤0.7	5	≥10	1	5	≤1.5	5	5	
TE 13007	80	≤25	8	700	400	≤0.7	5	≥10	1	5	≤1.5	5	5	
BUT 93	55	≤25	4	600	380	0.3	1	≥10	1	2	≤1	3	4	
TE 13004	75	≤25	4	600	300	≤0.9	2	≥10	1	5	≤0.6	2	4	
TE 13005	75	≤25	4	700	400	≤0.9	2	≥10	1	5	≤0.6	2	4	
BUX 84	40	≤45	2	800	400	0.4	1	50	0.1	5	≤3	1	5	
BUX 85	40	≤45	2	1000	450	0.4	1	50	0.1	5	≤3	1	5	
BUV 93	15	≤25	4	600	380	0.4	1	≥20	1	2	≤1.5	0.3	10	
BUV 94	15	≤25	2	800	400	0.4	1	40	0.1	5	≤1.5	0.3	10	
BUV 95	15	≤25	2	1000	450	0.4	1	40	0.1	5	≤1.5	0.3	10	
BUX 86	20	≤60	1	800	400	0.4	0.2	≥10	0.2	3	≤1.5	0.1	10	
BUX 87	20	≤60	1	1000	450	0.4	0.2	≥10	0.2	3	≤1.5	0.1	10	
TE 13002	40	≤25	1.5	600	300	≤0.7	1	≥8	0.5	2	≤1.0	1	4	
TE 13003	40	≤25	1.5	700	400	≤0.7	1	≥8	0.5	2	≤1.0	1	4	Fig. 3



Package dimensions for Transistors

All dimensions in mm

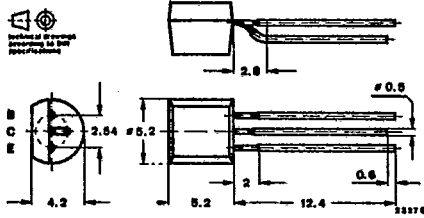


Fig. 1: 10A3 DIN 41868
JEDEC TO 92 Z
Weight max. 0.2 g

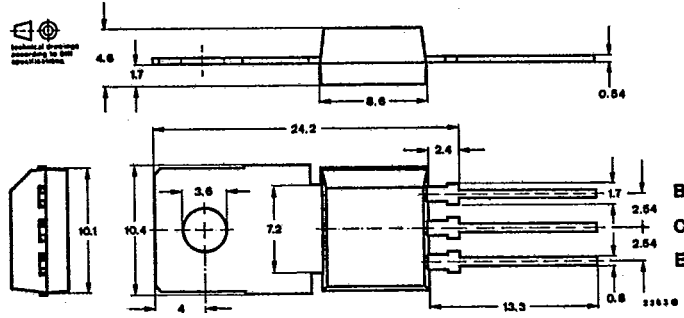


Fig. 2: 34A3 DIN 41869
JEDEC TO 202
Weight max. 1.8 g

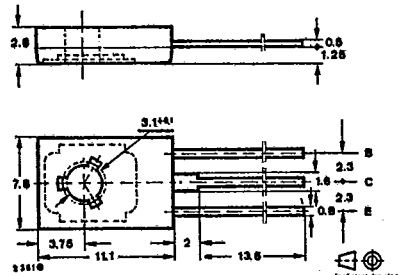


Fig. 3: 12A3 DIN 41869
JEDEC TO 125 (SOT 32)
Weight max. 0.8 g

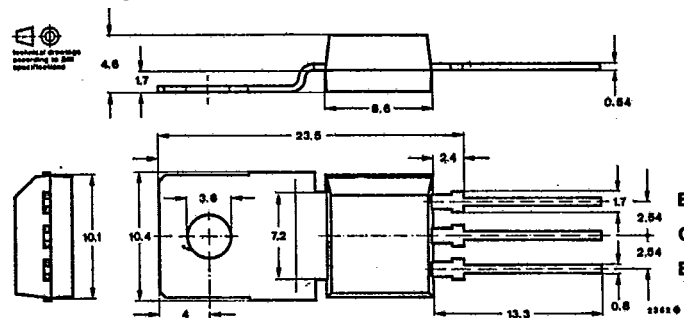


Fig. 4: 34A3 DIN 41869
JEDEC TO 202
Weight max. 1.8 g

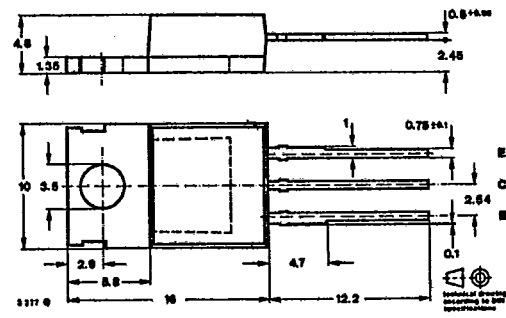


Fig. 5: 14A3 DIN 41869
JEDEC TO 220
Weight max. 2.5 g

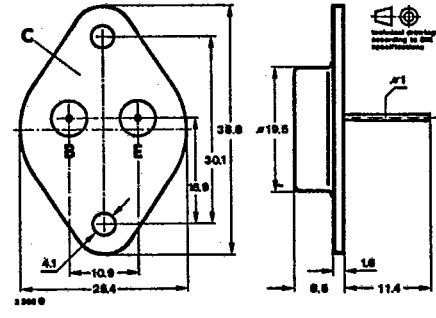


Fig. 6: 3B2 DIN 41872
JEDEC TO 3
Weight max. 20 g

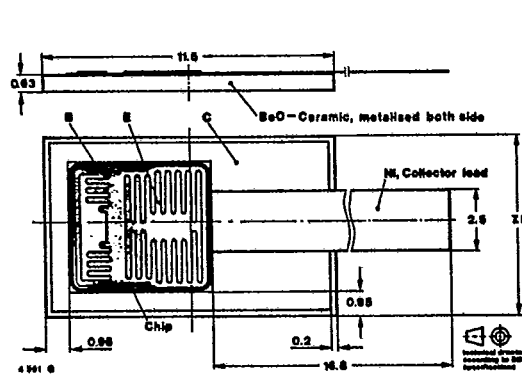


Fig. 7: Chip

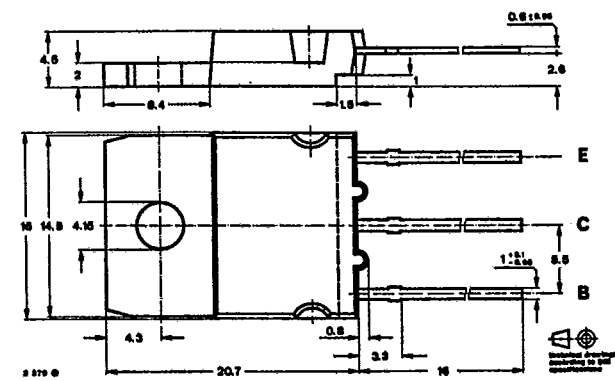


Fig. 8: 14A3 DIN 41869
JEDEC TO 220
Weight max. 2.5 g

