

TRANSISTORS

AF GERMANIUM ALLOY TRANSISTORS

Type	Structure	Outline	MAXIMUM RATINGS						R_{thjc} (R_{thja}) K/W	TYPICAL CHARACTERISTICS ($T_j = 25^\circ\text{C}$)				Notes	
			V_{CB0} V	V_{CE0} V	V_{EB0} V	I_C A	T_j $^\circ\text{C}$	P_{tot} W		f_T MHz	h_{21E} at I_C A	V_{CEsat} max. at V	I_C A		
• AC125 • AC126	PNP PNP	1 1	32 32	12 12	10 10	0.2 0.2	90 90	0.163 ³ 0.163 ³	(400) (400)	1.7 2.3	75...175 125...350	0.05 0.05			F=4 (max. 10) dB
• AC125(z) ¹ • AC125F(z) ¹	PNP PNP	1 1	32 32	12 12	12 12	0.25 0.25	75 75	0.125 ³ 0.125 ³	(400) (400)	1.5 1.5	50...250 50...250	0.05 0.05			F=4 (max. 10) dB F=3 (max. 5) dB
• AC125K(z) ¹ • AC125U(z) ¹	PNP PNP	1 1	40 60	12 12	12 12	0.25 0.25	75 75	0.125 ³ 0.125 ³	(400) (400)	1.5 1.5	50...250 50...250	0.05 0.05	0.25 0.25	0.1 0.1	$t_{on} = 0.6 \mu\text{s}$, $t_{off} = 1 \mu\text{s}$
• AC128 ² • AC176 • AC128K ² • AC176K • AC128(z) ^{1,2} • AC187 • AC188 • AC187K • AC188K	PNP NPN PNP NPN PNP NPN PNP NPN PNP	2 2 4 4 2 2 2 4 4	32 32 32 32 32 25 25 25 25	16 18 16 18 16 15 15 15 15	10 10 10 10 10 10 10 10 10	1 1 1 1 1 1 1 1 1	90 90 90 90 75 90 90 90 90	1 ⁴ 1 ⁴ 1 ⁴ 1 ⁴ 0.7 ⁴ 1 ⁴ 1 ⁴ 1 ⁴ 1 ⁴	50 50 55 55 50 50 50 55 55	1.5 3 1.5 3 1.5 3 1.5 3 1.5	50...250 50...250 50...250 50...250 50...250 100...500 100...500 100...500 100...500	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	1 1 1 1 1 1 1 1 1	complementary pairs: AC128/AC176 AC128K/AC176K AC187/AC188 AC187K/AC188K
• ASZ15 ² • ASZ16 ² • ASZ17 ² • ASZ18 ²	PNP PNP PNP PNP	3 3 3 3	100 60 60 100	60 32 32 32	40 20 20 40	8 8 8 8	90 90 90 90	26 ⁴ 26 ⁴ 26 ⁴ 26 ⁴	2 2 2 2	0.2 0.25 0.22 0.22	15...30 35...80 20...45 20...65	6 6 6 6	0.4 0.4 0.4 0.4	10 10 10 10	$t_{on} = \text{max. } 27 \mu\text{s}$, $t_{off} = \text{max. } 30 \mu\text{s}$, at $I_C = 1 \text{ A}$
• ASZ1015 ² • ASZ1016 ²	PNP PNP	3 2	80 60	60 32	40 20	6 6	90 90	22.5 ⁵ 22.5 ⁵	2 2	0.2 0.25	15...30 35...80	6 6	1 1	6 6	

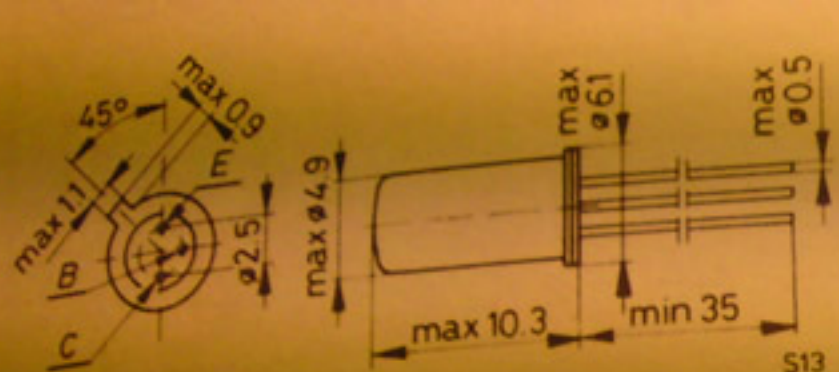


Fig. 1 TO-1

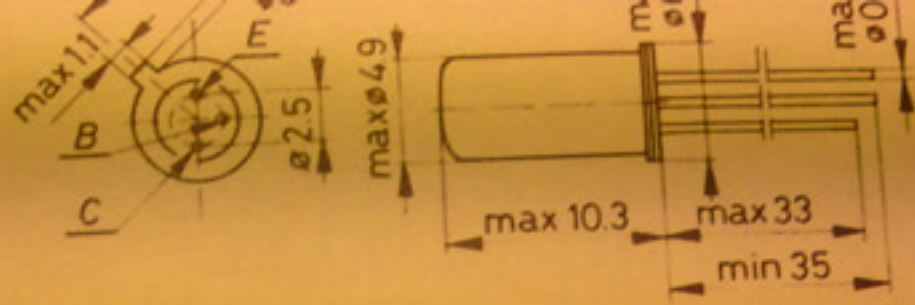


Fig. 2 TO-1

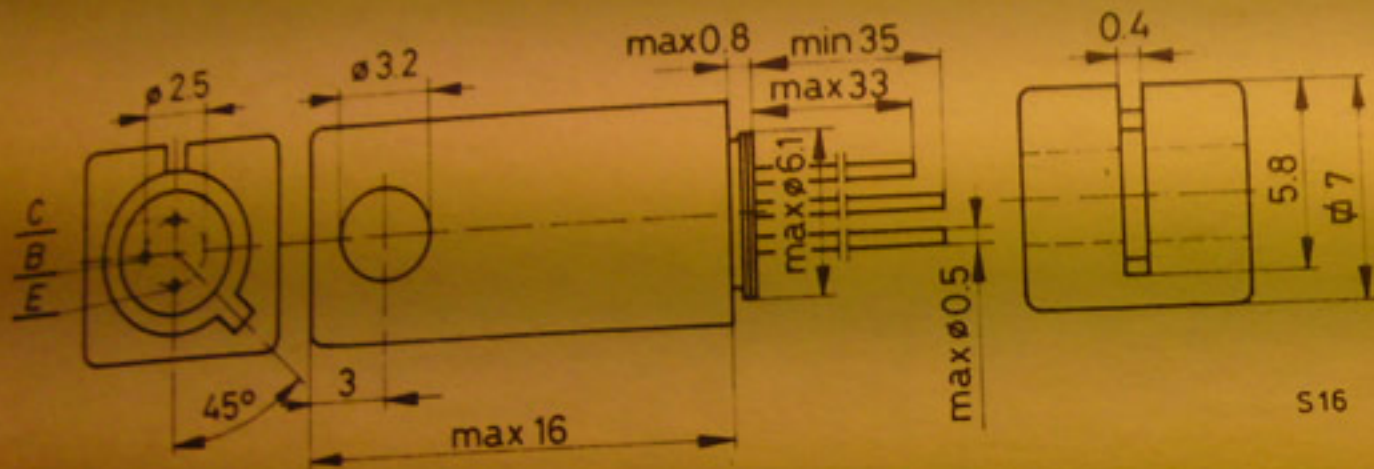
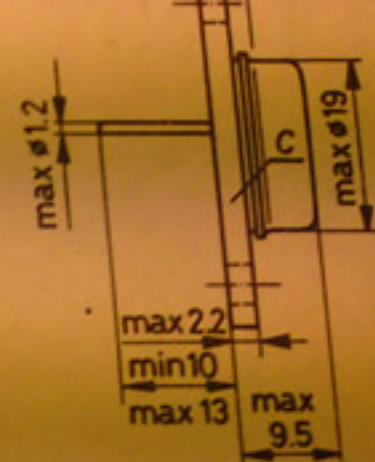


Fig. 4 TO-1 + heat conducting block

¹ Also available in groups h_{21E}.

Type	AC125U(z)		AC125(z), AC125F(z), AC125K(z), AC128(z)		
	V	VI	V	VI	VII
Code	V	VI	V	VI	VII
h _{21E} -range	50...100	75...150	50...100	75...150	125...250

² Also available

³ T_{amb} ≤ 25 °C

⁴ T_{case} ≤ 40 °C

⁵ T_{case} ≤ 45 °C