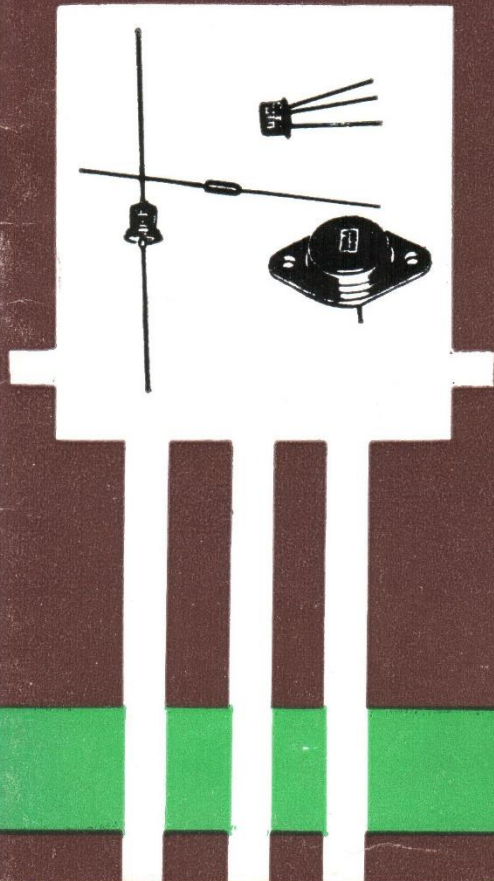


TESLA

842 133

**SEMI-CONDUCTORS
HALBLEITER-BAUELEMENTE**



1975

TRANSISTORS FOR INDUSTRIAL USE
TRANSISTOREN FÜR INDUSTRIELLE ANWENDUNG

SILICON PLANAR TRANSISTORS N-P-N AND P-N-P
SILIZIUM-HF-PLANAR-TRANSISTOREN N-P-N UND P-N-P

Type Typ	Design Ausführung	I_{CBO} at U_{CB}		h_{21E} at U_{CB}		I_E	f_T	U_{CES}	Maximum ratings Grenzdaten					
		I_{CBO} μA	U_{CB} V	h_{21E}	U_{CB} V				I_E mA	f_T MHz	U_{CES} V	U_{CBO} V	U_{CER} V	I_C mA
KFY34	NPN	0,01	60	35—125	10	-10	> 60 ¹⁾	< 1,5 ²⁾	75	50 ⁴⁾	500	7	800	200
KFY46	NPN	0,01	60	90—300	10	-10	> 70 ¹⁾	< 1,5 ²⁾	75	50 ⁴⁾	500	7	2600 ³⁾	200
KFY16	PNP	-0,01	-60	35—125	-10	10	> 50 ¹⁾	< 1,5 ²⁾	-60	-50 ⁴⁾	-500	-5	800	200
KFY18	PNP	-0,01	-60	90—300	-10	10	> 50 ¹⁾	< 1,5 ²⁾	-60	-50 ⁴⁾	-500	-5	2600 ³⁾	200

¹⁾ $f = 30$ MHz, ²⁾ $I_C = 150$ mA, $I_B = 15$ mA, ³⁾ With ideal cooling. Mit idealer Kühlung. ⁴⁾ $R_{BE} \leq 10 \Omega$
 Complementary pairs. Komplementär-Pärchen: KFY34/KFY16; KFY46/KFY18

SILICON SWITCHING TRANSISTORS N-P-N
SILIZIUM SCHALTTRANSISTOREN N-P-N

Type Typ	I_{CBO} μA	at U_{CB} V	h_{21E} at U_{CE}		I_C mA	f_T MHz	t_{on} ns	t_{off} ns	Maximum ratings Grenzdaten					
			h_{21E}	U_{CE} V					U_{CBO} V	U_{EBO} V	U_{CEO} V	I_C mA	P_C W	T_j $^{\circ}C$
KSY21	0,025	20	30—120	1	10	> 300	40	40	40	5	15	500	0,36 ²⁾	200
KSY34	0,07	50	> 10	5	500	> 250	50	95	60	5	40	600	2,6 ¹⁾	200
KSY62A	0,5	15	20—60	1	10	> 200	40	75	25	5	15	200	0,8 ²⁾	200
B				1	10	1								
KSY63	0,025	20	30—120	1	10	> 300	40	75	40	5	15	200	1 ¹⁾	200
KSY71	0,4	20	40—120	1	10	> 500	12	18	40	5	15	200	0,35 ²⁾	200
				2	100	1								

¹⁾ $T_a < 45^{\circ}C$, with ideal cooling
 $T_a < 45^{\circ}C$, mit idealer Kühlung ²⁾ $T_a < 25^{\circ}C$, without cooling
 $T_a < 25^{\circ}C$, ohne Kühlung ³⁾ $T_C \leq 25^{\circ}C$, with cooling surface
 $T_C \leq 25^{\circ}C$, mit Kühlfläche

SILICON SWITCHING TRANSISTORS P-N-P
SILIZIUM SCHALTTRANSISTOREN P-N-P

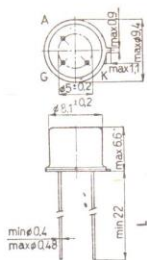
Type Typ	$-I_{CBO}$ μA	at $-U_{CB}$ V	h_{21E} at U_{CE}		$-I_C$ mA	f_T MHz	t_{on} ns	t_{off} ns	Maximum ratings Grenzdaten					
			h_{21E}	U_{CE} V					$-U_{CBO}$ V	$-U_{EBO}$ V	$-U_{CEO}$ V	$-I_C$ mA	P_C mW	T_j $^{\circ}C$
KSY82	0,08	6	35—135	0,5	30	> 250	60	90	12	4	10	100	200 ¹⁾	155

¹⁾ $T_a < 25^{\circ}C$, without cooling; ohne Kühlung

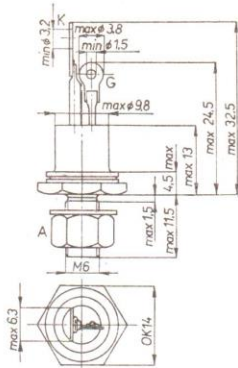
SILICON POWER SWITCHING TRANSISTORS N-P-N
SILIZIUM-LEISTUNGS-SCHALTTRANSISTOREN N-P-N

Type Typ	I_{CBO} mA	at U_{CBO} V	h_{21E} at U_{CB}		$-I_E$ A	f_T MHz	U_{BE} max	U_{CES} max	Maximum ratings Grenzdaten					
			h_{21E}	U_{CB} V					U_{CBO} V	U_{CES} V	U_{EBO} V	I_C A	T_j $^{\circ}C$	P_{Tot} W
KUY12	1	150	> 3*	10	0,5	3	0,35 ¹⁾	210	210	80	5	10	155	70 ⁴⁾
			> 10	1,7	0,5	1	0,6 ²⁾							
			> 12	1,7	2	1,2	1,7 ³⁾							
			> 10	1,7	8	2,4								

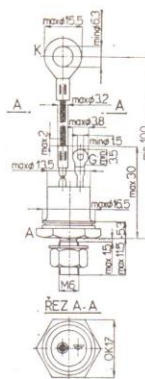
¹⁾ $I_C = 0,5$ A, $I_B = 0,05$ A ²⁾ $I_C = 2$ A, $I_B = 0,17$ A ³⁾ $I_C = 8$ A, $I_B = 0,8$ A ⁴⁾ $T_a < 35^{\circ}C$, $U_{CE} = 0 \dots 30$ V
 $t_r < 1 \mu s$
 $t_s < 1 \mu s$
 $t_f < 0,5 \mu s$ } $I_C = 10$ A, $\pm I_B = 1$ A, $U_{CE} = 40$ V



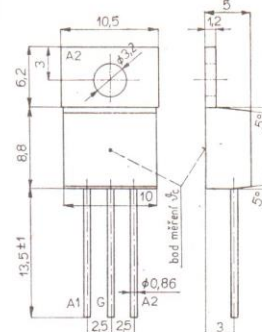
KT501–KT505
KT506 L = max. 21 mm
KT508 L = min. 19 mm



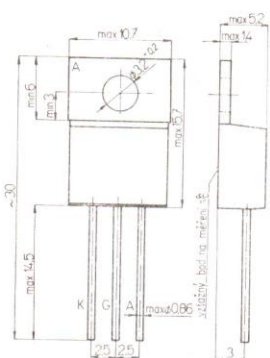
KT710–KT714



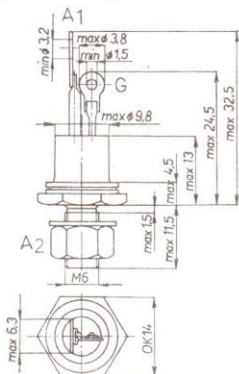
KT701–KT705



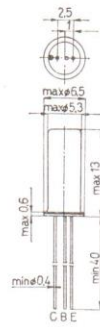
KT205/200
KT205/400
KT205/600



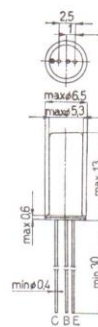
KT206



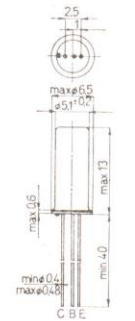
KT772–KT774
KT782–KT784



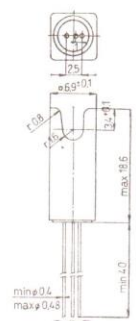
101NU70 – 156NU70
101NU71 – 104NU71



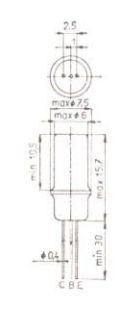
GS507



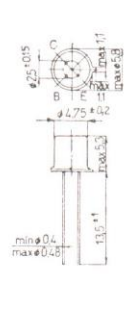
GC500–GC502
(new design)
GC510–GC512
GC520–GC522



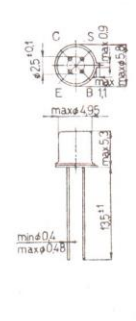
GC510K–GC512K
GC520K–GC522K



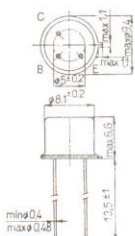
GC500 – GC502
(old design)



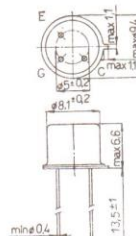
KC507–KC509
KS500
KSY62, KSY63
KSY21, KSY71, KSY82
TR12, TR15



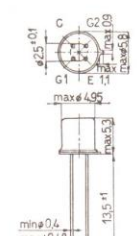
KF167
KF173
KF524, KF525



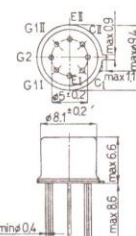
KF503–KF504
KF506–KF508
KF517
KF516, KF518
KF534, KF546



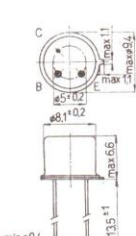
KF520



KF521



KF552



KSY34