

**1-4. High Voltage Transistors**

**1-4-1. SOT-23 Type Transistors**

Device and Polarity		V <sub>CEO</sub> (V)	I <sub>C</sub> (A)	Condition		h <sub>FE</sub>		Condition		V <sub>CE</sub> (sat), V <sub>BE</sub> (sat)(v)		Condition		f <sub>T</sub> (MHz)	
NPN	PNP			V <sub>CE</sub> (V)	I <sub>C</sub> (A)	MIN	MAX	I <sub>C</sub> (mA)	I <sub>B</sub> (mA)	MIN	MAX	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	MIN	TYP
KST42(1D)	KST92(2D)	300	0.5	10	30	40	20	2	0.5	0.9	20	10	50		
KST43(1E)	KST93(2E)	200	0.5	10	30	40	20	2	0.5	0.9	20	10	50		
	KST540(2L)	150	0.5	5	10	60	240	50	5	0.5	1	10	10	100	
KST5550(1F)		140	0.5	5	10	60	250	50	5	0.25	12	1	10	100	

**1-4-2. TO-92S Type Transistors**

Device and Polarity		V <sub>CEO</sub> (V)	I <sub>C</sub> (A)	Condition		h <sub>FE</sub>		Condition		V <sub>CE</sub> (sat), V <sub>BE</sub> (sat)(v)		Condition		f <sub>T</sub> (MHz)		
NPN	PNP			V <sub>CE</sub> (V)	I <sub>C</sub> (A)	MIN	MAX	I <sub>C</sub> (mA)	I <sub>B</sub> (mA)	TYP	MAX	TYP	MAX	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	MIN
	KSA1174	120	0.05	6	1	200	800	10	1	0.09	0.3		6	1	50	100
KSC2874		120	0.05	6	1	200	120	10	1	0.07	0.3		6	1	50	110

**1.4.3 TO-92 Type Transistors**

Device and Polarity		V <sub>CEO</sub> (V)	I <sub>C</sub> (A)	Condition		h <sub>FE</sub>		Condition		V <sub>CE</sub> (sat), V <sub>BE</sub> (sat)(v)		Condition		f <sub>T</sub> (MHz)	
NPN	PNP			V <sub>CE</sub> (V)	I <sub>C</sub> (A)	MIN	MAX	I <sub>C</sub> (mA)	I <sub>B</sub> (mA)	MAX	MAX	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	MIN	TYP
KSP44		400	0.3	10	10	50	200	10	1	0.5	0.75				
2N6517	2N6520	350	0.5	10	30	30	200	30	3	0.5	0.9	20	10	40	
KSP45		350	0.3	10	10	50	200	10	1	0.5	0.75				
KSP42	KSP92	300	0.5	10	30	40	20	2	0.5	0.9	20	10	50		
2N6516	2N6519	300	0.5	10	30	45	270	20	3	0.5	0.9	20	10	40	
2N6515	2N6518	250	0.5	10	30	50	300	30	3	0.5	0.9	20	10	40	
KSP43	KSP93	200	0.5	10	30	40	20	2	0.5	0.9	20	10	50		
2N6516		160	0.6	5	10	80	250	50	6	0.2	1	10	10	100	
	KSA709	150	0.7	2	50	40	240	200	20	0.4	1	10	50	50	
	2N5401	150	0.6	5	10	60	240	50	5	0.5	1	10	10	100	
KSC1009		140	0.7	2	50	40	240	200	20	0.2	0.86	10	50	30	
2N5551		140	0.6	5	10	60	250	50	5	0.25	1.2	10	10	100	
	2N5400	120	0.6	5	10	40	180	50	5	0.5	1	10	10	100	
KSC1845	KSA992	120	0.05	6	1	200	800	10	1	0.3		6	1	50	
	KSP51	100	0.6	5	50	40	250	50	5	0.3	1.2	10	10	60	
KSA1625		400	0.5	5	0.1	30	200	100	10	1	1.2				

**1-4-4. TO-92L Type Transistors**

Device and Polarity		V <sub>CEO</sub> (V)	I <sub>C</sub> (A)	Condition		h <sub>FE</sub>		Condition		V <sub>CE</sub> (sat), V <sub>BE</sub> (sat)(v)		Condition		f <sub>T</sub> (MHz)	
NPN	PNP			V <sub>CE</sub> (V)	I <sub>C</sub> (A)	MIN	MAX	I <sub>C</sub> (mA)	I <sub>B</sub> (mA)	MIN	MAX	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	MIN	TYP
KSC340		350	0.1	10	20	30	150	10	1	0.5	10	20	50		
KSC2330		300	0.1	10	20	40	240	10	1	0.5		30	10	50	
KSC2383	KSA1013	160	1	5	200	60	320	500	50	1.5		5	200	15	
KSC2310	KSA910	150	0.05	5	10	40	240	10	1	0.8		30	10	100	
KSC2316	KSA916	120	0.8	5	100	80	240	500	50	1		5	100	120	

**1-4-5. SOT-89 Type Transistors**

Device and Polarity		V <sub>CEO</sub> (V)	I <sub>C</sub> (A)	Condition		h <sub>FE</sub>		Condition		V <sub>CE</sub> (sat), V <sub>BE</sub> (sat)(v)		Condition		f <sub>T</sub> (MHz)	
NPN	PNP			V <sub>CE</sub> (V)	I <sub>C</sub> (A)	MIN	MAX	I <sub>C</sub> (mA)	I <sub>B</sub> (mA)	MAX	MAX	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	MIN	TYP
KSC2880	KSA1200	150	0.05	5	10	70	240	10	1	0.8		30	10	120	
KSC2881	KSA1201	120	0.8	5	100	80	240	500	50	1		5	100	120	

