

TRANSISTORS

FUNCTION GUIDE

2.1.5 TO-220 Type Transistors

I _c (A)	V _{CEO} (V)	Device Type		Condition		h _{FE}		Condition		V _{CE(sat)} (V)		Condition		f _T (MHz)		P _c (W)	
		NPN	PNP	V _{CE} (V)	I _c (A)	MIN	MAX	I _c (A)	I _B (A)	TYP	MAX	V _{CE} (V)	I _c (A)	MIN	TYP		
3	60	TIP31A	TIP32A	4	3	10	50	3	0.375		1.2	10	0.5	3		40	
		KSD880	KSB834	5	0.5	60	200	3	0.3	0.5		5	0.5		9	30	
		*KSC1983		4	0.5	500		2	0.05		1	12	0.2		15	30	
	60	BD241A	BD242A	4	3	10		3	0.6		1.2	10	0.5	3		40	
	80	TIP31B	TIP32B	4	3	10	50	3	0.375		1.2	10	0.5	3		40	
	80	BD241B	BD242B	4	3	10		3	0.6		1.2	10	0.5	3		40	
	100	TIP31C	TIP32C	4	3	10	50	3	0.375		1.2	10	0.5	3		40	
100	BD241C	BD242C	4	3	10		3	0.6		1.2	10	0.5	3		40		
4	60	KSC2233		5	1	30	150	4	0.4		1	5	0.5		10	40	
	80	KSD526	KSB595	5	0.5	40	240	3	0.3	1.0	1.7	5	0.5	3		30	
5	60	KSD73		10	1	70	240	5	0.5		2	10	0.3		20	30	
	70	KSD362		5	5	20	140	5	0.5		1	5	0.5		10	40	
	100	KSC2517		5	2	40	200	3	0.3		0.6					30	
	60	TIP41	TIP42	4	3	15	75	6	0.6		1.5	10	0.5	3		65	
6	45	BD243	BD244	4	3	15		6	1		1.5	10	0.5	3		65	
	60	BD243A	BD244A	4	3	15		6	1		1.5	10	0.5	3		65	
	60	TIP41A	TIP42A	4	3	15	75	6	0.6		1.5	10	0.5	3		65	
	80	BD243B	BD244B	4	3	15		6	1		1.5	10	0.5	3		65	
	80	TIP41B	TIP42B	4	3	15	75	6	0.6		1.5	10	0.5	3		65	
	100	BD243C	BD244C	4	3	15		6	1		1.5	10	0.5	3		65	
	100	TIP41C	TIP42C	4	3	15	75	6	0.6		1.5	10	0.5	3		65	
	120	KSD363		5	1	40	240	1	0.1		1	5	0.5		10	40	
	7	60	KSD568	KSB707	1	3	40	200	5	0.5		0.5					40
		80	KSD569	KSB708	1	3	40	200	5	0.5		0.5					40
100		KSC2334	KSA1010	5	3	40	200	5	0.5		0.8					40	
150		BU407							5	0.5		1	10	0.5	10		60
		BU407H							5	0.8		1	10	0.5	10		
200		BU406							5	0.5		1	10	5	10		60
	BU406H							5	0.8		1	10	5	10			
6	BU408							6	1.2		1	10	5	10			
8	45	BD533	BD534	2	2	30	100	2	0.2		0.8	5	0.5	3		50	
	60	BD535	BD536	2	2	30	100	2	0.2		0.8	5	0.5	3		50	
	80	BD537	BD538	2	2	30	100	2	0.2		0.8	5	0.5	3		50	
10	60	KSE3055T	KSE2955T	4	4	20	100	4	0.4		1.1	10	0.5	2		75	
	80	KSE44H	KSE45H	1	4	20		8	0.4		1	10	0.5		40	50	

* : high β