

TO-92 Plastic Package Transistors (NPN)

Maximum Ratings							Electrical Characteristics (Ta=25°C, Unless Otherwise Specified)																				
Type No.	V _{CEO} (V)	V _{CE0} (V)	V _{EBO} (V)	P _D (W)	I _C (A)	I _{CEO} (μA)	V _{CB} (V)	I _{CES} (μA)	V _{CE} (V)	h _{FE} @		I _C & V _{CE}		V _{CE(SAT)} (V)		V _{BE(SAT)} (V)	I _C (mA)	C _{ob} (pF)		f _t (MHz)			t _{off} (ns)	N _F (dB)	@ Freq (MHz)	C _{ob} (pF)	CDIL Case Style
	Min	Min	Min	@ Tc=25°C	Max	Max	Max	Max	Max	Min	Max	Min	Max	Max	Min	Max	Max	Typ	Max	Min	Typ	Max	Max	Max	Max	Max	Max
BF195	30	20	5	0.4	0.03	0.1	20			36	125	1	10						0.3					3.5		TO-92-2	
BF196	40	30	4	0.4	0.03	0.1	40			26		4	10													TO-92-2	
BF197	40	25	4	0.35	0.1	0.1	40			36		7	10						1100			7				TO-92-2	
BF198	40	30	4	0.625		0.1	40			26		4	10													TO-92-2	
BF199	40	25	4	0.35	0.1	0.1	20			40		7	10						400			5				TO-92-2	
BF224	45	30	4	0.35	0.05	0.1	20			30		7	10	0.15			10		300	600		2	2.5			TO-92-2	
BF237	45	30	4	0.35	0.1	0.1	20							0.25			10									TO-92-2	
BF238	45	30	4	0.35	0.1	0.1	20							0.25			10									TO-92-2	
BF240	40	40	4	0.35	0.03	0.1	20			65	220	1	10													TO-92-2	
BF241	40	40	4	0.35	0.03	0.1	20			35	125	1	10													TO-92-2	
BF254	30	20	5	0.35	0.1	0.1	10			65	220	1	10						260			1				TO-92-2	
BF254-3	30	20	5	0.35	0.1	0.1	10			65	125	1	10						260			1				TO-92-2	
BF254-4	30	20	5	0.35	0.1	0.1	10			100	220	1	10						260			1				TO-92-2	
BF255	30	20	5	0.4	0.03	0.1	20			36	125	1	10		0.65	0.74	1		0.3			1	3.5			TO-92-2	
BF391	200	200	6	0.625	0.5	0.1	160			25		1	10	2		2	20		50			10			2	TO-92	
BF392	250	250	6	0.625	0.5	0.1	200			25		1	10	2		2	20		50			10			2	TO-92	
BF393	300	300	6	0.625	0.5	0.1	200			25		1	10	2		2	20		50			1			2	TO-92	
BF420	300	300	5	0.8	0.5	0.01	200			50		25	20	0.5		2	20		60			10			1.6	TO-92-1	
BF422	250	250	5	0.8	0.5	0.01	200			50		25	20	0.5		2	20		60			10			1.6	TO-92-1	
BF494	30	20	5	0.3	0.03	0.1	20			67	220	1	10					1.5	120		260	1			1	TO-92-2	
BF494A	30	20	5	0.3	0.03	0.1	20			200	500	1	10					1.5	120		260	1			1	TO-92-2	
BF494B	30	20	5	0.3	0.03	0.1	20			100	220	1	10					1.5	120		260	1			1	TO-92-2	
BF495	30	20	5	0.3	0.03	0.1	20			35	125	1	10					1.5	120		260	1			1	TO-92-2	
BF495C	30	20	5	0.3	0.03	0.1	20			67	125	1	10					1.5	120		260	1			1	TO-92-2	
BF495D	30	20	5	0.3	0.03	0.1	20			35	76	1	10					1.5	120		260	1			1	TO-92-2	
BF496	30	20	3	0.3	0.02	0.5	20			15		2	10						550			2				TO-92	
BF959	30	20	3	0.625	0.1	0.1	20			35		5	10	1		1	30		700			20			0.7	TO-92-2	
BSY95A	20	15	5	0.625	0.2	0.05	16			30	200	1	0.4	0.35	0.67	0.87	10		6	200		10				TO-92	

TO-92 Plastic Package Transistors (NPN)

Maximum Ratings										Electrical Characteristics (Ta=25°C, Unless Otherwise Specified)														
Type No.	V _{CBO} (V)	V _{CEO} (V)	V _{EBO} (V)	P _D (W)	I _C (A)	I _{CBO} (μA)	V _{CB} (V)	I _{CES} (μA)	V _{CE} (V)	h _{FE}	I _C (mA)	V _{CE} (V)	V _{CE(SAT)} (V)	V _{BE(SAT)} (V)	I _C (mA)	C _{ob} (pF)	f _T (MHz)	I _C (mA)	t _{off} (ns)	N _F (dB)	Freq (MHz)	C _{ie} (pF)	CDIL Case Style	
	Min	Min	Min	@Tc=25°C	Max	Max	Max	Max	Min															Max
CC2369	40	15	5	0.625	0.2	0.4	20			40	120	10	1	0.25	0.7	0.85	10	4	500					TO-92-1
CC337	50	45	5	0.625	0.8	0.1	20			40	500	1	0.7		500	5		200	10				TO-92-1	
CC337-16	50	45	5	0.625	0.8	0.1	20			40	500	1	0.7		500	5		200	10				TO-92-1	
CC337-25	50	45	5	0.625	0.8	0.1	20			40	500	1	0.7		500	5		200	10				TO-92-1	
CC337-40	50	45	5	0.625	0.8	0.1	20			40	500	1	0.7		500	5		200	10				TO-92-1	
CC338	25	25	5	0.625	0.8	0.1	20			40	500	1	0.7		500	5		200	10				TO-92-1	
CC338-16	30	25	5	0.625	0.8	0.1	20			40	500	1	0.7		500	5		200	10				TO-92-1	
CC338-25	30	25	5	0.625	0.8	0.1	20			40	500	1	0.7		500	5		200	10				TO-92-1	
CC338-40	30	25	5	0.625	0.5	0.1	20			40	500	1	0.7		500	5		200	10				TO-92-1	
CD50	500	400	5	0.625	0.3			0.5	400	30	150	100	10	1		100							TO-92-1	
CD635	45	45	5	0.8	0.5	0.1	30			25	5	2	0.5		500	7		200	50				TO-92-4	
CD637	60	60	5	0.8	0.5	0.1	30			25	5	2	0.5		500	7		200	50				TO-92-4	
CD639	80	80	5	0.8	0.5	0.1	30			25	5	2	0.5		500	7		200	50				TO-92-4	
CD8050B	30	25	5	1.0	2	0.5	20			85	160	100	1	0.5	1.25	500	20	150	100				TO-92	
CD8050C	30	25	5	1.0	2	0.5	20			120	200	100	1	0.5	1.25	500	20	150	100				TO-92	
CD8050D	30	25	5	1.0	2	0.5	20			160	300	100	1	0.5	1.25	500	20	150	100				TO-92	
CD9011	18	18	3	0.625	0.1	0.05	18			29	273	1	5	0.2	0.85	10	3.5	250	10		4		TO-92	
CD9011D	18	18	3	0.625	0.1	0.05	18			29	44	1	5	0.2	0.85	10	3.5	250	10		4	0.001	TO-92	
CD9011E	18	18	3	0.625	0.1	0.05	18			40	59	1	5	0.2	0.85	10	3.5	250	10		4	0.001	TO-92	
CD9011F	18	18	3	0.625	0.1	0.05	18			54	80	1	5	0.2	0.85	10	3.5	250	10		4	0.001	TO-92	
CD9011G	18	18	3	0.625	0.1	0.05	18			72	108	1	5	0.2	0.85	10	3.5	250	10		4	0.001	TO-92	
CD9011H	18	18	3	0.625	0.1	0.05	18			97	146	1	5	0.2	0.85	10	3.5	250	10		4	0.001	TO-92	
CD9011I	18	18	3	0.625	0.1	0.05	18			132	198	1	5	0.2	0.85	10	3.5	250	10		4	0.001	TO-92	
CD9011J	18	18	3	0.625	0.1	0.05	18			182	273	1	5	0.2	0.85	10	3.5	250	10		4	0.001	TO-92	
CD9013	40	30	5	0.625	0.5	0.1	25			64	275	50	1	0.2	1	150	10	200	50		6	0.001	TO-92	
CD9013D	40	30	5	0.625	0.5	0.1	25			64	91	50	1	0.2	1	150	10	200	50		6	0.001	TO-92	