

# TO-92 Plastic Package Transistors (NPN)

Maximum Ratings						Electrical Characteristics (Ta=25°C, Unless Otherwise Specified)																					
Type No.	V <sub>CB0</sub> (V)	V <sub>CEO</sub> (V)	V <sub>EBO</sub> (V)	P <sub>D</sub> (W)	I <sub>C</sub> (A)	I <sub>CB0</sub> (μA)	V <sub>CB</sub> (V)	I <sub>CES</sub> (μA)	V <sub>CE</sub> (V)	h <sub>FE</sub>	β	I <sub>C</sub> & (mA)	V <sub>CE</sub> (V)	V <sub>CE(SAT)</sub> (V)	V <sub>BE(SAT)</sub> (V)	I <sub>C</sub> (mA)	C <sub>ob</sub> (pF)	f <sub>t</sub> (MHz)	β	I <sub>C</sub> (mA)	t <sub>on</sub> (ns)	N <sub>F</sub> (dB)	Freq (MHz)	C <sub>in</sub> (pF)	CDIL Case Style		
	Min	Min	Min	@ T <sub>C</sub> =25°C	Max																					Min	Max
BF195	30	20	5	0.4	0.03	0.1	20			36	125	1	10					0.3			1				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