

High Voltage Transistors

TYPE NO.	POLARITY	CASE	MAXIMUM RATINGS			HFE				VCE(SAT)		f _T min (MHz)	Cob Cre max (pF)
			P _d (mW)	I _C ICM (mA)	VCEO (V)	min	max	I _C (mA)	VCE (V)	max (V)	I _C (mA)		
BC 236	N	TO-106	300	50	120	25	—	10	5	2	50	40	8
BC 285	N	TO-18	360	100	120	30	—	5	30	0.5	10	50	4
BC 312	N	TO-39	800	150	100	50	200	30	10	2	50	—	6+
BC 393	P	TO-18	400	100	180	50	—	10	10	0.3	10	50	7
BC 394	N	TO-18	400	100	180	30	—	10	10	0.3	10	50	5
BC 530	P	TO-92A	625	100	120	40	180	10	5	0.25	50	100	6
BC 531	P	TO-92A	625	100	150	60	240	10	5	0.25	50	100	6
BC 532	N	TO-92A	625	100	140	60	250	10	5	0.15	10	100	6
BC 533	N	TO-92A	625	100	160	80	250	10	5	0.15	10	100	6
BCW 50	N	TO-18	500	100	120	18	—	3	10	—	—	50	5
BCX 27	N	TO-92F	350	200	80	70	400	10	5	0.25	100	100	6
BCX 28	P	TO-92F	350	200	80	70	400	10	5	0.25	100	100	6
BCX 29	N	TO-92F	350	200	100	70	140	10	5	0.25	100	100	6
BCX 30	P	TO-92F	350	200	100	70	140	10	5	0.25	100	100	6
BD 115	N	TO-39	800	150	180	22	—	50	100	9	100	—	—
BF 117	N	TO-39	680	100	140	25	—	30	10	1	30	40	4
BF 120	N	TO-18	300	50	220	20	—	10	10	2	10	55	7
BF 137	N	TO-39	680	100	160	25	—	30	10	1	30	50	4
BF 156	N	TO-39	800	100	120	30	—	30	10	2	50	50	6
BF 157	N	TO-39	800	100	150	30	—	30	10	2	50	50	6
BF 174	N	TO-39	800	100	150	30	—	10	50	1	25	40	3.5
BF 177	N	TO-39	800	50	60	20	—	15	10	—	—	120+	3.5
BF 178	N	TO-39	800	50	115	20	—	30	20	—	—	120+	3.5
BF 179	N	TO-39	800	50	115	20	—	20	15	—	—	120+	3.5
BF 257	N	TO-39	800	100	160	25	—	30	10	1	30	50	5
BF 258	N	TO-39	800	100	250	25	—	30	10	1	30	50	5
BF 259	N	TO-39	800	100	300	25	—	30	10	1	30	50	5
BF 294	N	TO-39	800	—	160	30	—	10	50	—	—	40	3.5
BF 297	N	TO-92F	625	100	160	30	150	30	10	1	30	50	5
BF 298	N	TO-92F	625	100	250	30	150	30	10	1	30	50	5
BF 299	N	TO-92F	625	100	300	30	150	30	10	1	30	50	5
BF 305	N	TO-39	600	50	150	20	—	30	20	—	—	50	3.5
BF 336	N	TO-39	800	100	180	20	—	30	10	—	—	50	3.5
BF 337	N	TO-39	800	100	200	20	—	30	10	—	—	50	3.5
BF 338	N	TO-39	800	100	225	20	—	30	10	—	—	50	3.5
BF 391	N	TO-92A	625	500	200	40	—	10	10	2	20	50	2
BF 391P	N	TO-92PA	750	500	200	25	—	1	10	2	20	50	2
BF 392	N	TO-92A	625	500	250	40	—	10	10	2	20	50	2
BF 392P	N	TO-92PA	750	500	250	25	—	1	10	2	20	50	2
BF 393	N	TO-92A	625	500	300	40	—	10	10	2	20	50	2
BF 393P	N	TO-92PA	750	500	300	40	—	10	10	2	20	50	2
BF 397	P	TO-92F	625	100	90	40	250	10	10	0.5	10	—	—
BF 398	P	TO-92F	625	100	150	30	200	10	10	0.5	10	—	—
BFR 57	N	TO-39	800	100	160	25	—	30	10	1	30	90+	4.2+
BFR 58	N	TO-39	800	100	250	25	—	30	10	1	30	90+	4.2+
BFR 59	N	TO-39	800	100	300	25	—	30	10	1	30	90+	4.2+
BFS 89	N	TO-39	580	100	300	25	—	50	10	1	30	90+	3+
BFS 90	P	TO-39	800	100	140	30	—	10	10	1	30	—	—
BFS 91	P	TO-39	800	100	80	40	—	10	10	0.5	10	—	—

+ Typical value

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			P _d (mW)	I _C I _{CM} (mA)	V _{CEO} V _{CEV} (V)	min	max	I _C (mA)	V _{CE} (V)	max (V)	I _C (mA)		
BFT 47	N	TO-39	5000 [▲]	100	160	25	—	30	10	1	30	50	—
BFT 48	N	TO-39	5000 [▲]	100	250	25	—	30	10	1	30	50	—
BFT 49	N	TO-39	5000 [▲]	100	300	25	—	30	10	1	30	50	—
BFT 57	N	TO-18	360	200	160	25	—	30	10	1	30	110+	5.5+
BFT 58	N	TO-18	360	200	250	25	—	30	10	1	30	110+	5.5+
BFT 59	N	TO-18	360	200	300	25	—	30	10	1	30	110+	5.5+
BFW 43	P	TO-18	400	100	150	40	—	10	10	0.5	10	60	7
BFW 44	P	TO-39	700	100	150	40	—	10	10	0.5	10	60	7
BFW 45	N	TO-39	800	50	130	20	120	50	20	10	50	80	6
BFX 98	N	TO-39	800	100	150	30	—	25	10	1	25	40	8
BFY 57	N	TO-39	800	100	125	30	150	30	10	1.5	50	40	12
BFY 80	N	TO-18	500	100	90	30	—	2	10	0.9	2	50	8
BSS 38	N	TO-92F	300 [◆]	100	80	20	—	4	1	0.7	4	60	—
BSV 68	P	TO-18	250	100	100	30	—	25	5	0.25	25	50	5
BSY 79	N	TO-18	300	30	120	30	—	1	1	0.5	2	100+	4+
CX 703	N	TO-92A*	800*	100	160	40	200	10	10	1.5	20	50	3*
CX 703A	N	TO-92A*	800*	100	200	40	200	10	10	1.5	20	50	3*
CX 703B	N	TO-92A*	800*	100	250	40	200	10	10	1.5	20	50	3*
MH 7301	N	TO-220B	1250	100	160	40	—	30	10	1.5	30	50	5
MH 7302	N	TO-220B	1250	100	200	40	—	30	10	1.5	30	50	5
MH 7303	N	TO-220B	1250	100	250	40	—	30	10	1.5	30	50	5
MPSA 42	N	TO-92A	625	100	300	40	—	30	10	0.5	20	50	3
MPSA 43	N	TO-92A	625	100	200	50	200	30	10	0.4	20	50	4
MPSD 01	N	TO-92A	625	100	200	20	—	30	10	—	—	40	3+
MPSD 02	N	TO-92A	350	50	140	25	—	10	10	—	—	40	—
MPSD 03	N	TO-92A	350	50	100	25	—	10	10	—	—	40	—
MPSD 52	P	TO-92A	350	50	140	25	—	10	10	—	—	40	—
MPSD 53	P	TO-92A	350	50	100	25	—	10	10	—	—	40	—
MPSL 01	N	TO-92A	500	100	120	50	300	10	5	0.3	50	60	8
MPSL 51	P	TO-92A	625	600	100	40	250	50	5	0.3	50	60	8
2N 3114	N	TO-39	800	200	150	30	120	30	10	1	50	40	9
2N 3634	P	TO-39	600	100	140	50	150	50	10	0.5	50	150	10
2N 3742	N	TO-39	1000	100	300	20	200	30	10	1	10	30	6
2N 3743	N	TO-39	1000	50	300	25	250	30	10	8	30	30	15
2N 3923	N	TO-39	800	100	150	30	120	25	10	1	25	40	3.5
2N 4926	N	TO-39	1000	50	200	20	200	30	10	1	10	30	6
2N 4927	N	TO-39	1000	50	250	20	200	30	10	1	10	30	6
2N 4928	P	TO-39	600	100	100	25	200	10	10	0.5	10	100	6
2N 5058	N	TO-39	1000	150	300	35	150	30	25	1	30	30	10
2N 5059	N	TO-39	1000	150	250	30	150	30	25	1	30	30	10
2N 5400	P	TO-92A	350	600	120	40	180	10	5	0.5	50	100	6
2N 5401	P	TO-92A	350	600	150	60	240	10	5	0.5	50	100	6
2N 5550	N	TO-92A	350	600	140	60	250	10	5	0.25	50	100	6
2N 5551	N	TO-92A	350	600	160	80	250	10	5	0.2	50	100	6
2N 6218	N	TO-92F*	800*	50	300	20	—	20	10	1	10	50	5
2N 6219	N	TO-92F*	800*	50	250	20	—	20	10	1	10	50	5
2N 6220	N	TO-92F*	800*	50	200	20	—	20	10	2	20	50	5
2N 6221	N	TO-92F*	800*	50	150	20	—	20	10	2	20	50	5

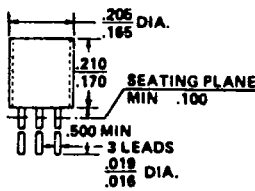
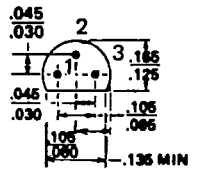
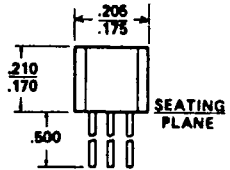
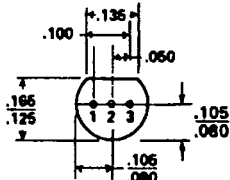
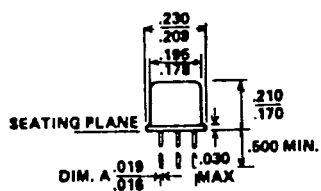
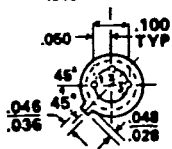
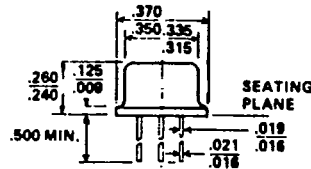
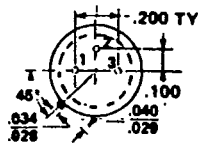
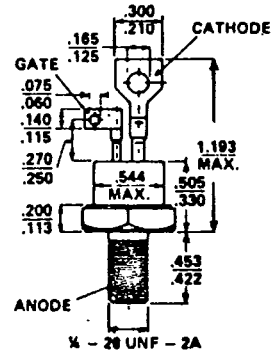
▲ T_C = 25°C ◆ T_A = 75°C * With x-67 heat sink + Typical value

High Voltage Transistors

TYPE NO.	POLARITY	CASE	MAXIMUM RATINGS			HFE				VCE(SAT)		f _T min (MHz)	Cob Cre max (pF)
			P _d (mW)	I _C I _{CM} (mA)	V _{CEO} V _{CER} (V)	min	max	I _C (mA)	V _{CE} (V)	max (V)	I _C (mA)		
2SA 637	P	TO-18	300	50	150 •	30	—	15	3	1	15	40	10
2SA 675	P	TO-92B	250	100	80 •	50	300#	20	3	1.5	20	100	10
2SA 685	P	TO-92B	300	50	150 •	30	—	15	3	1	15	40	10
2SA 749	P	TO-92B	250	50	100	50	—	20	1	0.3	50	40	3.5+
2SC 505	N	TO-39	600	200	300	40	140#	50	5	1	50	30	20
2SC 506	N	TO-39	600	200	200	40	140#	50	5	1	50	30	20
2SC 507	N	TO-39	750	100	120	40	240#	10	5	0.8	10	100	4
2SC 526	N	TO-39	2300♦	55	150	20	—	45	20	—	—	80	3.5 •
2SC 1012	N	TO-39	2500▲	60	165 •	20	—	40	20	1	10	80	3 •
2SC 1012A	N	TO-39	2500▲	60	250 •	20	—	40	20	10	60	80	3 •
2SC 1033	N	TO-18	300	25	150	30	—	5	10	1	5	75	7
2SC 1048	N	TO-39	600	50	200	40	200#	25	10	1.3	25	40	4.2

♦ T_C = 25°C ▲ T_C ≤ 125°C # HFE groupings available + Typical value

Packaging Information

<p>PACKAGING INFORMATION</p>	<p>1. CATHODE 2. GATE 3. ANODE</p>  	<p>SCR 1. CATHODE 2. GATE 3. ANODE</p>  
	<p>TO-18 (PLASTIC)</p>	<p>TO-92</p>
<p>1. CATHODE 2. GATE 3. ANODE</p>  	<p>SCR 1. CATHODE 2. GATE 3. ANODE</p>  	<p>TRIAC 1. MT 1 2. GATE 3. MT 2</p> 
<p>TO-18</p>	<p>TO-39</p>	<p>TO-48D</p>