

High Power Bipolar Transistors – V_{CE0} to 150V

— continued

TO-220, General Purpose

I_c (av) max.	V_{CE0} max.	h_{FE} min.	β	I_c A	P_{tot} @ 25°C W	Mfrs. List No.	Mfrs. List No.
A	V			A	W	NPN	PNP
1	40	40		0.2	30	—	TIP30
1	60	40		0.2	30	ST	TIP29A TIP30A
1	100	40		0.2	30	ST	TIP29C TIP30C
1	100	40		0.2	30	ON	TIP29C —
2	100	40		0.2	30	ST	BD239C —
3	40	25		1.0	40	—	TIP31 TIP32
3	60	25		1.0	40	ST	TIP31A TIP32A
3	80	25		1.0	40	ON	— BD242B
3	100	25		1.0	40	ON/ST	TIP31C TIP32C
3	100	25		1.0	40	ON	BD241C BD242C
4	60	40		0.5	50	ST	BD535 —
5	45	—		—	40	SEM	— BD948
5	60	25		1.0	40	ST	BD241A —
5	100	25		1.0	40	ST	BD241C —
5	120	40		0.5	40	SEM	BD955 BD956
6	60	30		0.3	65	ST	TIP41A TIP42A
6	80	30		0.3	65	ON	— BD244B
6	100	30		0.3	65	ON/ST	TIP41C TIP42C
6	100	30		0.3	65	ON/ST	BD243C BD244C
7	50	30		2.5	40	—	— 2N6109
8	45	30		3.0	60	SEM	— BD202
8	60	30		3.0	60	SEM	BD203 BD204
8	80	30		2.0	60	SEM	BDX77 BDX78
8	120	40		3.0	50	ON	MJE15028 MJE15029
8	150	40		3.0	50	ON	MJF15030 MJF15031
10	60	20		4.0	75	ST	MJE3055T MJE2955T
10	60	—		—	75	—	— 2N6099
10	60	60		2.0	50	ON	D44H8 D45H8
10	80	60		2.0	50	ON	D44H11 D45H11
10	100	20		4.0	90	SEM	BDT95 BDT96
15	60	40		5.0	125	SEM	BDT81 BDT82
15	100	40		5.0	125	SEM	BDT85 —
15	100	40		1.0	90	—	BD743C BD744C

FOR PACKAGE AND PIN-OUT DETAILS, SEE PAGE 358

SD283

Price Each

Mfrs. List No.	Order Code	1+	25+	100+	500+	1K+
BD202	290-440					
BD203	360-570					
BD204	290-452					
BD239C	360-673					
BD241A	360-697					
BD241C (ON)	473-558					
BD241C (ST)	360-703					
BD242B	247-066					
BD242C	247-078					
BD243C (ON)	931-111					
BD243C (ST)	360-727					
BD244B	247-091					
BD244C (ON)	931-123					
BD244C (ST)	360-740					
BD535	360-818 †					
BD743C	361-707					
BD744C	361-719					
BD948	290-786					
BD955	290-798					
BD956	290-804					
BDT81	290-634					
BDT82	290-646					
BDT85	290-658 †					
BDT95	290-660					
BDT96	290-671 †					
BDX77	290-816					
BDX78	290-828					
D44H8	NEW 352-6215					
D44H11	741-802					
D45H8	NEW 352-6227					
D45H11	741-814					
MJE2955T	361-070					
MJE3055T	361-082					
MJE15028	NEW 352-6379					
MJE15029	NEW 352-6355					
MJF15030	NEW 352-6409					
MJF15031	NEW 352-6410					
TIP29A	361-100					
TIP29C (ON)	334-3376					
TIP29C (ST)	361-124					
TIP30	361-136					
TIP30A	361-148					
TIP30C	361-161					
TIP31	361-173					
TIP31A	361-185					
TIP31C (ON)	931-470					
TIP31C (ST)	361-203					
TIP32	361-215					
TIP32A	361-227					
TIP32C (ON)	931-482					
TIP32C (ST)	361-239					
TIP41A	361-276					
TIP41C (ON)	931-494					
TIP41C (ST)	361-290					

continued

Mfrs. List No.	Order Code	1+	25+	100+	500+	1K+
TIP42A	361-318					
TIP42C (ON)	931-500					
TIP42C (ST)	361-320					
2N6099	361-604					
2N6109	361-653					

† Available until stocks are exhausted

High Voltage Power Transistors – V_{CE0} 150V to 800V

High Voltage Switching

I_c (av) max.	V_{CE0} max.	V_{CES} (V_{CBO}^*) max.	V_{CE} (Sat) V	@ I_c A	t_f max. (typ.) μs	P_{tot} @ 25°C W	Package	Mfrs. List No.
NPN								
0.1	250	—	—	—	—	6	TO-202	PS BF858
0.25	300	500*	—	—	—	11	TO-126	— BD232
0.5	350	375	—	—	—	20	TO-126	ON BD159
1.0	250	300	0.5	0.05	—	10	TO-39	ST 2N3440
1.0	250	350*	1.0	1.0	—	40	TO-220	PI TIP47
1.0	300	400*	1.0	1.0	—	40	TO-220	PI TIP48
1.0	300	400*	1.0	1.0	—	40	TO-220	ON TIP48
1.0	300	450*	0.5	0.05	—	10	TO-39	ST 2N3439
1.0	400	500*	1.0	1.0	—	40	TO-220	ON/PI TIP50
1.5	400	700	1.0	1.0	0.7	40	TO-126	ON MJE13003
2.0	250	375*	—	—	—	35	TO-66	— 2N3584
3.0	800	900	1.0	0.75	1.0	40	TO-220	HIT 2SC2979
4.0	350	650	1.0	2.0	0.8	25	TO-251	ON BUD42D-1
4.0	400	700*	6.0	3.0	0.9	60	TO-220	ON MJE13005
4.0	450	1000	2.5	4.0	0.25	75	TO-220	PI TIP1760A
5.0	400	850	1.5	2.5	0.8	70	TO-220	ST BUV46
5.0	450	850	0.3	1.0	—	80	TO-220	ST BUL49D
5.0	450	1000*	—	—	—	100	TO-3	— BUS11A
5.0	450	1000	1.5	2.0	0.8	70	TO-220	ST BUV46A
5.0	600	1200	0.6	2.0	0.175	75	TO-220AB	ON MJE18204
6.0	400	900	3.0	4.0	0.5	60	TO-3	ST BUI326A
6.0	400	900	3.0	4.0	0.75	70	SOT-93	ST BU426A
6.0	800	—	—	—	—	80	TO-3	— BUY89
7.5	450	1000	2.8	2.5	0.1	80	TO-220	ST BU405A
8.0	400	450	2.0	4.0	0.5	80	TO-220	ON MJE5852
8.0	400	500*	1.0	4.0	0.8	50	TO-220	HIT 2SC2898
8.0	400	700	1.5	5.0	0.7	80	TO-220	ON/ST MJE13007
10.0	200	400	1.0	5.0	0.75	60	TO-220	ST BU406
10.0	400	400	0.8	1.0	—	125	TO-3	ON MJ423
10.0	400	800	1.5	5.0	0.5	100	TO-3	ST BUX80
10.0	400	1000	3.3	8.0	0.3*	100	TO-3	ST BUY69A
10.0	450	1000*	—	—	—	100	TO-3	— BUX81
10.0	800	1500	1.0	5.0	0.4	175	TO-3	ON MJ16018
12.0	400	700	1.5	8.0	0.7	100	TO-220	ON/ST MJE13009
12.0	800	1200*	—	—	—	160	TO-3	— BUX88
15.0	400	—	5.0	15.0	0.4	175	TO-3	SEM BUX48
15.0	400	850	5.0	15.0	0.7	175	TO-3	ST 2N6547
15.0	450	850*	—	—	—	175	TO-3	— BUS13A
15.0	450	1000*	—	—	—	175	TO-3	SEM BUS48A
15.0	450	—	5.0	12.0	0.4	175	TO-3	SEM BUX48A
15.0	450	1000	2.0	8.0	0.8	150	TO-218	ON/ST BUV48A
15.0	500	1000	1.0	10.0	0.08*	150	TO-247	ON MJW16010A
15.0	700	1200	1.5	6.0	0.7	150	SOT-93	ST BUV48C
20.0	400	700	1.8	10.0	0.7	175	TO-3	ON MJ13333
20.0	800	—	—	—	—	100	TO-3P	— BUP37
30.0	400	850*	—	—	—	250	TO-3	— BUS14
30.0	400	850	1.5	20.0	0.8	250	TO-3	ST BUX98
30.0	450	1000*	—	—	—	250	TO-3	— BUS14A
30.0	450	1000	2.8	10.0	0.1	200	SOT-93	ST BU420A
30.0	450	1000	1.5	16.0	0.8	250	TO-3	ST BUX98A
30.0	700	1200	1.5	12.0	0.8	250	TO-3	ST BUX98C
50.0	450	1000	1.2	32.0	0.4	250	ISOTOP	ST BUV298AV
70.0	200	300*	—	—	—	300	TO-3	SEM BUP52
PNP								
1.0	375	375	1.0	1.0	—	2	TO-220	ON MJE5731A

FOR PACKAGE AND PIN OUT DETAILS, SEE PAGE 358

SD33 / SD32

Mfrs. List No.	Order Code	1+	25+	100+	500+	1K+
BD159	300-4089					
BD232	359-282					
BF858	359-361					
BU326A	359-415 †					
BU406	359-427					
BU426A	359-452					
BUD42D-1	300-5525					
BU405A	234-874					
BU420A	359-476					
BUL49D	162-905					
BUP37	427-202					
BUP52	359-531					
BUS11A	359-567					
BUS13A	359-580					
BUS14	359-609					
BUS14A	359-610					
BUS48A	260-526					
BUV46	359-671					
BUV46A	251-926					
BUV48A (ON)	931-342					
BUV48A (ST)	359-701					
BUV48C	359-713					

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