

# DARLINGTONS

## POWER DARLINGTON SELECTOR CHART

Package $I_c$	TO-39 A	TO-39 2A	TO-220 10A (BDX) 8A (TIP)		TO-3 10A
			NPN	PNP	
40	—	—	—	—	2N6383
45	BCX21	—	BDX33	BDX34	—
60	BD320 BD322	BD321 BD323	BDX33A TIP120	BDX34A TIP125	2N6384
80	—	—	BDX33B TIP121	BDX34B TIP126	2N6385
100	—	—	BDX33C TIP122	BDX34C TIP127	—
120	—	—	BDX33D	—	—

**TABLE 4 – PNP SILICON HIGH CURRENT DARLINGTON TRANSISTORS**

The devices shown in this table are designed for applications requiring very high current gain. The monolithic construction has the inherent advantages of fast switching times, low saturation voltages and low leakage currents.

The devices are listed in order of decreasing Collector Current ( $I_c(\max)$ ), Breakdown Voltages and Power Dissipation ( $P_{tot}$ ) etc.

Type	$I_c$ (Max) A	$V_{CBO}$ V	$V_{CEO}$ V	Max $V_{CE(sat)}$ at			$h_{FE}$ at			$P_{tot}$ at $T_{case} = 25^\circ C$ W	Package	Comple- ment
				V	$I_c$ A	$I_b$ mA	Min	Max	$I_c$ A			
BDX34C	10	100	100	2.5	3	6	750	—	3	70	TO-220	BDX33C
BDX34B	10	80	80	2.5	3	6	750	—	3	70	TO-220	BDX33B
BDX34A	10	60	60	2.5	4	8	750	—	4	70	TO-220	BDX33A
BDX34	10	45	45	2.5	4	8	750	—	4	70	TO-220	BDX33
TIP127	8	100	100	2	3	12	IK	—	3	65	TO-220	TIP122
TIP126	8	80	80	2	3	12	IK	—	3	65	TO-220	TIP121
TIP125	8	60	60	2	3	12	IK	—	3	65	TO-220	TIP120

# DARLINGTONS

**TABLE 4a – NPN SILICON HIGH CURRENT DARLINGTON TRANSISTORS**

The devices shown in this table are designed for applications requiring very high current gain. The monolithic construction has the inherent advantages of fast switching times, low saturation voltages and low leakage currents.

The devices are listed in order of decreasing Collector Current ( $I_C(\max)$ ), Breakdown Voltages and Power Dissipation ( $P_{tot}$ ) etc.

Type	$I_C$ (Max) A	$V_{CBO}$ V	$V_{CEO}$ V	Max $V_{CE(sat)}$ at			$h_{FE}$ at			$P_{tot}$ at $T_{case} = 25^\circ C$ W	Package	Complement
				$I_C$ A	$I_B$ mA		Min	Max	$I_C$ A			
BDX33D	10	120	120	2.5	3	6	750	—	3	70	TO-220	—
BDX33C	10	100	100	2.5	3	6	750	—	3	70	TO-220	BDX34C
2N6385	10	80	80	2.0	5	10	1K	20K	5	100	TO-3	—
BDX33B	10	80	80	2.5	3	6	750	—	3	70	TO-220	BDX34B
2N6384	10	60	60	2.0	5	10	1K	20K	5	100	TO-3	—
BDX33A	10	60	60	2.5	4	8	750	—	4	70	TO-220	BDX34A
BDX33	10	45	45	2.5	4	8	750	—	4	70	TO-220	BDX34
2N6383	10	40	40	2.0	5	10	1K	20K	5	100	TO-3	—
TIP122	8	100	100	2	3	12	1K	—	3	65	TO-220	TIP127
TIP121	8	80	80	2	3	12	1K	—	3	65	TO-220	TIP126
TIP120	8	60	60	2	3	12	1K	—	3	65	TO-220	TIP125
BD323C	2	80	60	1.7	2	2	10K	—	1	10	TO-39	—
BD323B	2	80	60	1.7	2	2	5K	—	1	10	TO-39	—
BD323A	2	80	60	1.7	2	2	1K	—	1	10	TO-39	—
BD321C	2	80	60	1.7	2	2	10K	—	1	5	TO-39	—
BD321B	2	80	60	1.7	2	2	5K	—	1	5	TO-39	—
BD321A	2	80	60	1.7	2	2	1K	—	1	5	TO-39	—
BD322C	1	80	60	1.6	1	1	10K	—	0.5	7.5	TO-39	—
BD322B	1	80	60	1.6	1	1	5K	—	0.5	7.5	TO-39	—
BD322A	1	80	60	1.6	1	1	1K	—	0.5	7.5	TO-39	—
BD320C	1	80	60	1.6	1	1	10K	—	0.5	5	TO-39	—
BD320B	1	80	60	1.6	1	1	5K	—	0.5	5	TO-39	—
BD320A	1	80	60	1.6	1	1	1K	—	0.5	5	TO-39	—
BCX21	1	60	45	1.6	1	1	1.5K	—	0.5	3.5	TO-39	—