

T.35.29

8 High speed switching darlington transistors

- These are of darlington type and are provided with a higher h_{FE} .
- Switching speed is in the range of $t_r = 1\mu s$.
- Best suited to switching regulator and motor control applications

Device type	V_{CBO}	V_{CEO}	V_{CEO} (sus)	I_C cont.	P_C	h_{FE} min.	I_C	V_{CE}	Switching time (Max.)			Package	Net weight Grams	Equivalent circuit Page 40
	Volts	Volts	Volts	Amps.	Watts		Amps.	Volts	t_{on} $\mu sec.$	t_{stg} $\mu sec.$	t_r $\mu sec.$			
ETG36-040C	500	500	400	20	175	50	10	5	0.8	2.5	1.0	TO-3	17	Fig. B6
ETG36-040D	500	500	400	20	175	50	10	5	0.8	2.5	1.0	TO-3	17	Fig. B9

Note: These are available in two versions – i.e. with built-in fast recovery diode or without. Please select the version best suited for your purpose.

9 Power darlington transistors

- The DC current gain is very high.
- Highly versatile

Device type	V_{CBO}	V_{CEO}	V_{CEO} (sus)	I_C cont.	P_C	h_{FE} min.	I_C	V_{CE}	Switching time (Max.)			Package	Net weight Grams	Equivalent circuit Page 40
	Volts	Volts	Volts	Amps.	Watts		Amps.	Volts	t_{on} $\mu sec.$	t_{stg} $\mu sec.$	t_r $\mu sec.$			
2SD1797	60	60	50	7	30	800	3	1.5	—	—	—	TO-220F	2.5	Fig. B3
2SD833	80	80	80	7	60	2000	3	3	1.0	5.0	1.0	TO-220AB	2	Fig. B4 *
2SD916	80	80	80	7	40	1000	3	1.5	1.0	5.0	1.0	TO-220AB	2	Fig. B4 *
2SD1726	150	100	80	7	25	400	5	2	2.0	15	2.0	TO-220F	2.5	Fig. B3
2SD834	250	200	180	4	25	1500	2	2	1.7	15	18	TO-220AB	2	Fig. B2
2SD1073	300	250	250	4	60	1000	2	2	3	15	10	TO-220AB	2	Fig. B1
2SD2350	300	300	300	6	40	500	4	2	—	—	—	TO-220F	2.5	Fig. B8
2SD1071	450	450	300	6	40	500	4	2	3	15	10	TO-220AB	2	Fig. B8
2SD835	400	400	350	6	40	400	4	1.5	1.0	12.0	6.0	TO-220AB	2	Fig. B4 *
2SD1072	500	500	350	5	60	500	3	1.5	1.5	12.0	6.0	TO-220AB	2	Fig. B3
ET366	60	60	50	7	40	4000	3	3	—	—	—	TO-220F	2.5	Fig. B4 *
ET378	100	100	100	10	80	1000	6	2	—	—	—	TO-3P	6	Fig. B4 *
ET370	100	100	100	15	100	1000	8	3	—	—	—	TO-3P	6	—
ET393	150	100	100	10	80	700	3	4	—	—	—	TO-3PF	6	Fig. B1
ET386	300	250	250	4	40	1000	2	2	—	—	—	TO-220F	2.5	Fig. B1
ET365	450	450	300	8	40	500	4	2	—	—	—	TO-220F	2.5	Fig. B8
ET385	400	400	350	6	40	400	4	1.5	1.0	12.0	6.0	TO-220F	2.5	Fig. B4 *
ET375	650	450	450	15	80	100	15	5	1.0	12.0	2.0	TO-3P	6	Fig. B7 *

* Without B0 terminal

10 Large current speed switching transistors

- The I_C can handle large current (30 Amps) yet the switching speed is very high.
- Efficient parallel operation
- Motor speed controls, inverter and chopper use

Device type	V_{CBO}	V_{CEO}	V_{CEO} (sus)	I_C cont.	P_C	h_{FE} min.	I_C	V_{CE}	Switching time (Max.)			Package	Net weight Grams
	Volts	Volts	Volts	Amps.	Watts		Amps.	Volts	t_{on} $\mu sec.$	t_{stg} $\mu sec.$	t_r $\mu sec.$		
2SC2930	650	400	400	30	200	15	10	5	1.0	3.0	1.0	TO-3	19