

BIPOLAR TRANSISTORS

Ratings and Specifications

COLLMER SEMICONDUCTOR INC 48E D ■ 2238792 0001601 366 ■ COL

T.35-19

5 High voltage high speed switching transistors

- The transistor is best suited for use with 240V AC input switching regulators.
- Can operate within the 30kHz range

Device type	V _{CB0}	V _{CE0}	V _{CE0}	I _c	P _c	h _{FE}	I _c	V _{CE}	Switching time (Max.)			Package	Net weight Grams	Equivalent circuit Page 40
	Volts	Volts	(sus) Volts	cont. Amps.	Watts	min.	Amps.	Volts	t _{on} μsec.	t _{sig} μsec.	t _r μsec.			
2SC3505	900	700	700	6	80	10	2	5	1.0	5.0	1.0	TO-3P	6	—
2SC3033	900	700	700	7	80	8	3	5	0.5	2.5	0.8	TO-3	17	Fig. B5
2SD2234	1500	700	700	3	40	18	0.6	5	1.0	4.0	0.5	TO-220F	2.5	—
2SD2047	1500	700	700	5	80	18	1	5	1.0	3.0	0.5	TO-3PF	6	—
2SC3866	900	800	800	3	40	10	1	5	1.0	4.0	0.8	TO-220F	2.5	—
2SC3550	900	800	800	3	80	10	1	5	1.0	4.0	0.8	TO-3P	6	—
2SC4603	900	800	800	3	80	10	1	5	1.0	4.0	0.8	TO-3PF	6	—
2SC4538	900	800	800	5	80	10	2	5	1.0	4.0	0.8	TO-3PF	6	—
2SC4419	900	800	800	6	100	10	2	5	1.0	4.0	0.8	TO-3P	6	—
2SC3030	900	800	800	7	80	8	3	5	0.5	2.5	0.8	TO-3P	6	Fig. B5

6 Low voltage high current switching transistors

- High speed switching performance
- Suitable for motor control applications such as DC-DC converters, golf carts, fork-lifts and industrial sewing machines using battery power supply.

Device type	V _{CB0}	V _{CE0}	V _{CE0}	I _c	P _c	h _{FE}	I _c	V _{CE}	Switching time (Max.)			Package	Net weight Grams
	Volts	Volts	(sus) Volts	cont. Amps.	Watts	min.	Amps.	Volts	t _{on} μsec.	t _{sig} μsec.	t _r μsec.		
2SD1049	120	80	80	25	80	20	25	5	1.0	2.5	0.4	TO-3P	6
2SD913	200	80	80	25	150	20	25	5	1.0	2.5	0.4	TO-3	19
2SD914	200	120	120	25	150	20	25	5	1.0	2.5	0.4	TO-3	19

7 Ultra high β transistors (UBT)

- The DC current gain is extraordinarily high (min.700).
- h_{FE} – I_c characteristics are linear.
- Ideally suited for series regulators, color TV, power supplies and similar devices

Device type	V _{CB0}	V _{CE0}	V _{CE0}	I _c	P _c	h _{FE}	I _c	V _{CE}	Switching time (Max.)			Package	Net weight Grams	Equivalent circuit Page 40
	Volts	Volts	(sus) Volts	cont. Amps.	Watts	min.	Amps.	Volts	t _{on} μsec.	t _{sig} μsec.	t _r μsec.			
2SD1740	150	100	80	5	30	700	1	4	—	—	—	TO-220F	2.5	Fig. B1
2SD1128	150	100	100	5	30	700	1	4	—	—	—	TO-220AB	2	Fig. B1
2SD923	150	100	100	10	80	700	3	4	—	—	—	TO-3P	6	Fig. B1
2SD982	200	180	180	5	60	700	1	4	—	—	—	TO-220AB	2	Fig. B1
2SD921	200	180	180	5	80	700	1	4	—	—	—	TO-3P	6	Fig. B1
ET382	200	180	180	5	40	700	1	4	—	—	—	TO-220F	2.5	Fig. B1