



# MOLD TYPE BIPOLAR TRANSISTORS

## Ratings and Specifications

### 1 High speed switching transistors

- Suitable for 50kHz class switching regulators
- Allows transformers to be reduced in size

Device type	$V_{CB0}$	$V_{CE0}$	$V_{CE0}$ (sus)	$I_c$ cont.	$P_c$	$h_{FE}$ min.	$I_c$ Amps.	$V_{ce}$ Volts	Switching time (Max.)			Package	Net mass Grams
	Volts	Volts	Volts	Amps.	Watts				$t_{on}$ $\mu$ sec.	$t_{sig}$ $\mu$ sec.	$t_f$ $\mu$ sec.		
2SC2438	150	80	80	7	50	60	1	1	0.5	2.5	0.3	TO-220AB	2
2SC4383	200	180	180	8	40	30	3	4	2.0	4.0	1.0	TO-220F17	2.5
2SC2767	300	200	200	5	60	20	1	5	1.0	2.0	1.0	TO-220AB	2
2SC2768	250	200	200	10	50	25	2	5	0.8	2.0	0.5	TO-220AB	2
2SC2769	300	200	200	10	100	20	2	5	0.8	2.0	0.5	TO-3P	6
2SC2944	250	200	200	15	100	20	2	5	0.8	1.5	0.4	TO-3P	6
2SC2626	400	300	300	15	80	10	6	5	0.8	2.0	0.8	TO-3P	6
2SC2440	450	400	400	5	40	15	2	5	1.5	4.0	1.3	TO-220AB	2
2SC3723	450	400	400	5	40	10	2	5	1.0	2.5	0.5	TO-220AB	2
2SC3822	450	400	400	5	30	10	2	5	1.0	2.5	0.5	TO-220F17	2.5
2SC3821	450	400	400	5	40	10	2	5	1.0	2.5	1.0	TO-220F17	2.5
2SC4242	450	400	400	7	40	10	4	5	1.0	2.5	0.5	TO-220AB	2
2SC4977	450	400	400	7	40	10	4	5	1.0	2.5	0.5	TO-220F15	2.5
2SC2625	450	400	400	10	80	10	4	5	1.0	2.0	1.0	TO-3P	6
2SC2929	500	400	400	3	60	20	0.5	5	1.5	2.0	0.8	TO-220AB	2
2SC4622	500	400	400	7	40	10	4	5	1.0	2.5	0.5	TO-220AB	2
2SC4795	500	400	400	30	120	20	12	5	1.0	2.5	0.5	TO-3P	6
2SC2542	650	400	400	5	60	10	2	5	1.0	2.0	1.0	TO-220AB	2
2SC4786	900	500	500	5	40	20	1	5	1.0	4.0	0.5	TO-220F15	2.5
2SC3047	850	500	500	6	40	15	0.5	5	1.0	3.0	1.0	TO-220AB	2
ET405	450	400	400	10	80	10	4	5	1.0	2.0	1.0	TO-3PF	6
ET403	850	500	500	6	40	15	0.5	5	1.0	3.0	1.0	TO-220F17	2.5
ET206	850	500	500	10	80	15	1	5	1.0	3.5	1.0	TO-3P	6

#### Letter symbols

$V_{CB0}$ : Collector-to-base voltage (Emitter open)  
 $V_{CE0}$ : Collector-to-emitter voltage (Base open)  
 $V_{ce}$ : Collector-to-emitter saturation voltage

$V_{CE0}$  (sus): Collector-to-emitter sustaining voltage (Base open)  
 $V_{CEX}$  (sus): Collector-to-emitter sustaining voltage (Base reverse bias)

$I_c$  (cont): Collector-current (continuous)  
 $P_c$ : Maximum power dissipation

$h_{FE}$ : DC current gain  
 $t_{on}$ : Turn-on time  
 $t_{sig}$ : Storage time  
 $t_f$ : Fall time  
SOA: Safe operating area