

## SWITCHING POWER TRANSISTOR SERIES (No. 1)

### Features

- \* Short switching time
- \* High breakdown voltage
- \* Wide ASO
- \* High reliability because of planar type

### Use

- \* Switching regulators
- \* Motor control

### Standard Type

\*sign(Tc=25°C)

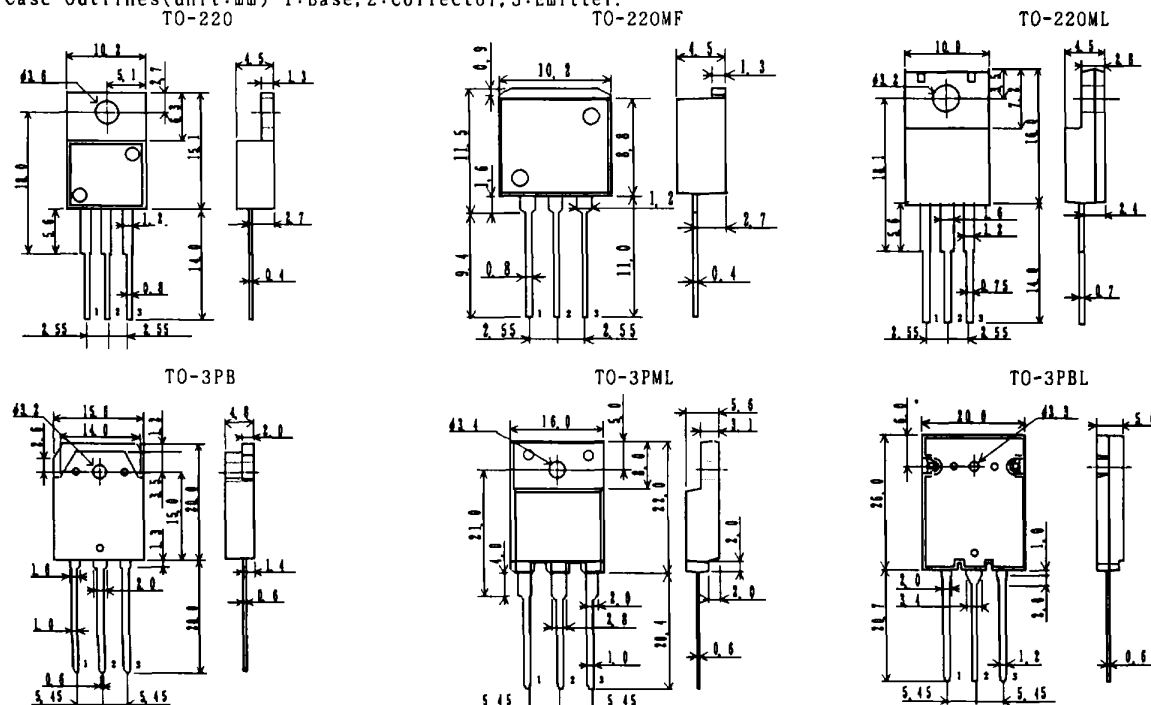
Type No	Package	Absolute Maximum Ratings/Ta=25°C				Electrical Characteristics/Ta=25°C											
		V <sub>CBO</sub> (V)	V <sub>CEO</sub> (V)	I <sub>C</sub> (A)	*P <sub>C</sub> (W)	V <sub>CE</sub> (V)	I <sub>C</sub> (A)	h <sub>FE</sub> (1)	V <sub>CE</sub> (V)	I <sub>C</sub> (A)	h <sub>FE</sub> min (2)	V <sub>CE</sub> (V)	I <sub>C</sub> (A)	f <sub>T</sub> (MHz)	t <sub>f</sub> max (μs)		
2SC3038 2SC3039	TO-220	500	400	4 7	40 50	5	0.4 0.8	15~50	5	2 4	8	10	0.4 0.8	20	1.0		
2SC3083 2SC3040 2SC3277 2SC3042	TO-3PB			6 8 10 12	60 80 90 100		0.4 0.8 1.2 1.6			2 4 6 8			0.4 0.8 1.2 1.6				
2SC4171 2SC4172	TO-220 MF			3 5	40 50		0.3 0.6			1.5 3			0.3 0.6			18	1.0
2SC3086 2SC3087	TO-220			3 5	40 50		0.3 0.6			1.5 3			0.3 0.6				
2SC3088 2SC3089 2SC3090	TO-3PB	4 7 10	60 80 100	0.3 0.6 1.2	1.5 3 6	0.3 0.6 1.2											
2SC3183 2SC3184	TO-220	900	800	0.2 0.5	25 30	0.02 0.06	0.1 0.3	20m 60m	15	0.7							
2SC3149 2SC3150				1.5 3	40 50	0.1 0.2					0.5 1	0.1 0.2					
2SC3151 2SC3152 2SC3153	TO-3PB			1.5 3 6	60 80 100	0.1 0.2 0.4					0.5 1 2	0.1 0.2 0.4					
2SC3466				1200	650	8					120	5	1.0	10~40	5	4	6

### Classification by hFE.

When specifying the hFE rank, specify two ranks or more in principle.  
(V<sub>CEO</sub>=400V, 500V) (V<sub>CEO</sub>=800V)

15	L	30	20	M	40	30	N	50	10	K	20	15	L	30	20	M	40
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Case Outlines(unit:mm) 1:Base, 2:Collector, 3:Emitter.



These specifications are subject to change without notice.

## SWITCHING POWER TRANSISTOR SERIES (No. 2)

### Features

- ☆ Short switching time
- ☆ High breakdown voltage
- ☆ Wide ASO
- ☆ High reliability because of planar type

### Use

- ☆ Switching regulators
- ☆ Motor control

✱ High-Speed Type MBIT Process)

\*sign(Tc=25°C)

Type No.	Package	Absolute Maximum Ratings/Ta=25°C				Electrical Characteristics/Ta=25°C									
		V <sub>CB0</sub> (V)	V <sub>CEO</sub> (V)	I <sub>C</sub> (A)	*P <sub>C</sub> (W)	V <sub>CE</sub> (V)	I <sub>C</sub> (A)	h <sub>FE</sub> (1)	V <sub>CE</sub> (V)	I <sub>C</sub> (A)	h <sub>FE</sub> min (2)	V <sub>CE</sub> (V)	I <sub>C</sub> (A)	f <sub>T</sub> (MHz)	t <sub>f</sub> max (uS)
2SC4219 2SC4220	TO-220 MF	500	400	4 7	40 50	5	0.4 0.8	15~50	5	2 4	10	10	0.4 0.8	20	0.3
2SC4105 2SC4106 2SC4107 2SC4164	TO-220			4 7 10 12	40 50 60 70		0.4 0.8 1.2 1.6			2 4 6 8			0.4 0.8 1.2 1.6		
2SC4160 2SC4161 2SC4162 2SC4163	TO-220 ML			4 7 10 12	25 30 35 40		0.4 0.8 1.2 1.6			2 4 6 8			0.4 0.8 1.2 1.6		
2SC4108 2SC4109 2SC4110	TO-3PB			12 16 25	100 140 160		1.6 2.0 3.2			8 10 16			1.6 2.0 3.2		
2SC4423 2SC4424 2SC4425	TO-3P ML			12 16 25	55 60 65		1.6 2.0 3.2			8 10 16			1.6 2.0 3.2		
2SC4221 2SC4222	TO-220 MF			3 5	40 50		0.3 0.6			1.5 3			0.3 0.6		
2SC3446 2SC3447	TO-220			3 5	40 50		0.3 0.6			1.5 3			0.3 0.6		
2SC3749 2SC3750	TO-220 ML			3 5	25 30		0.3 0.6			1.5 3			0.3 0.6		
2SC3448 2SC3449 2SC3450 2SC3451 2SC3988	TO-3PB			4 7 10 15 25	60 80 90 100 150		0.3 0.6 0.8 1.2 2.4			1.5 3 4 6 12			0.3 0.6 0.8 1.2 2.4		
2SC4457 2SC4458 2SC4459 2SC4460 2SC4461	TO-3P ML			4 7 10 15 25	40 45 50 55 65		0.3 0.6 0.8 1.2 2.4			1.5 3 4 6 12			0.3 0.6 0.8 1.2 2.4		
2SC3989 2SC3990 2SC3991	TO-3PBL			25 35 50	200 250 300		2.4 3.2 4.8			12 16 24			2.4 3.2 4.8		
2SC4223 2SC4224	TO-220 MF	1100	800	1.5 3	40 50	5	0.1 0.2	10~40	5	0.5 1	8	10	0.1 0.2	15	0.3
2SC3456 2SC3457	TO-220			1.5 3	40 50		0.1 0.2			0.5 1			0.1 0.2		
2SC3751 2SC3752	TO-220 ML			1.5 3	25 30		0.1 0.2			0.5 1			0.1 0.2		
2SC3458 2SC3459 2SC3460 2SC3461 2SC3552	TO-3PB			3 4.5 6 8 12	80 90 100 140 150		0.2 0.3 0.4 0.6 0.8			1 1.5 2 3 4			0.2 0.3 0.4 0.6 0.8		
2SC4426 2SC4427 2SC4428 2SC4429 2SC4430	TO-3PML			3 4.5 6 8 12	45 50 55 60 65		0.2 0.3 0.4 0.6 0.8			1 1.5 2 3 4			0.2 0.3 0.4 0.6 0.8		
2SC3992 2SC3993 2SC3994	TO-3PBL			12 16 25	200 250 300		0.8 1.2 1.6			4 6 8			0.8 1.2 1.6		

In addition to the above we have surface mounting (S M P package).  
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