

## 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)

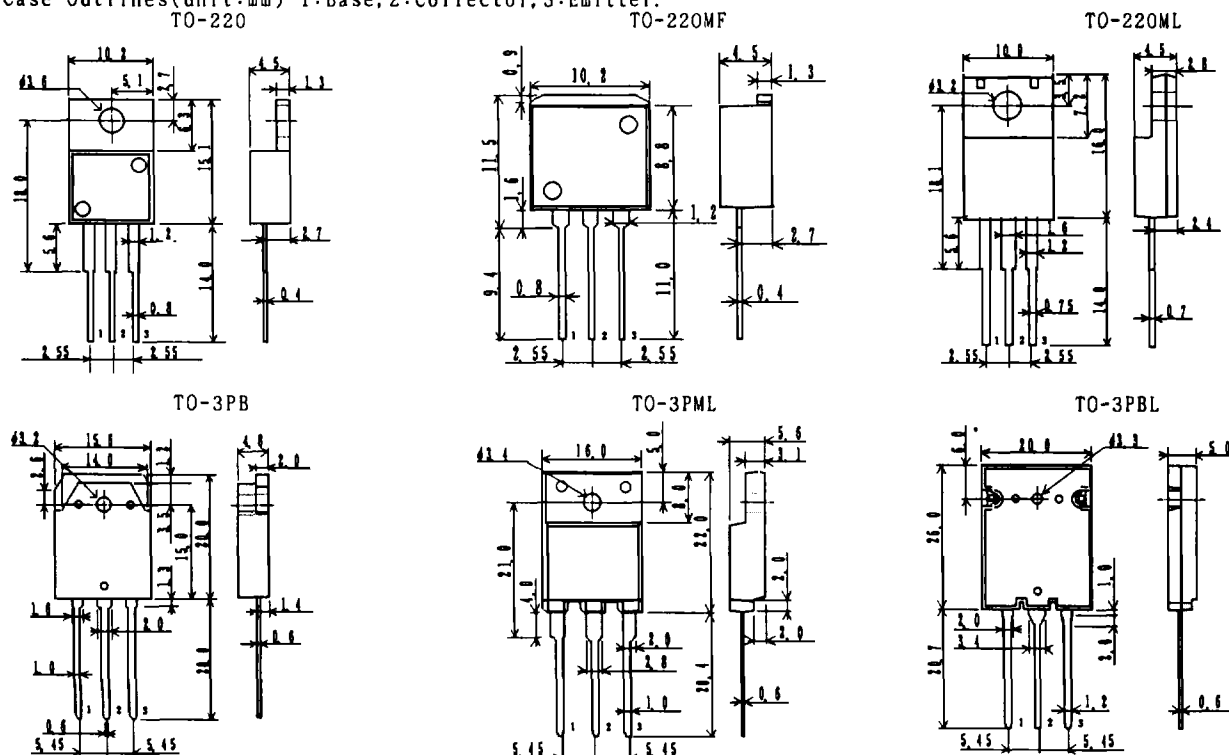
Type No	Package	Absolute Maximum Ratings/Ta=25°C				Electrical Characteristics/Ta=25°C										
		V <sub>CE0</sub> (V)	V <sub>CEO</sub> (V)	I <sub>C</sub> (A)	*P <sub>C</sub> (W)	V <sub>CE</sub> (V)	I <sub>C</sub> (A)	h <sub>FE</sub> (1)	V <sub>CE</sub> (V)	I <sub>C</sub> (A)	h <sub>FE</sub> min (2)	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	40	5	0.4	15~50	5	2	8	10	0.4	20	1.0	
				7	50		0.8			4			0.8			
2SC3083 2SC3040 2SC3277 2SC3042	TO-3PB	800	500	6	60	5	0.4	15~50	5	2	8	10	0.4	18	1.0	
				8	80		0.8			4			0.8			
				10	90		1.2			6			1.2			
				12	100		1.6			8			1.6			
2SC4171 2SC4172	TO-220 MF	800	500	3	40	5	0.3	15~50	5	1.5	8	10	0.3	18	1.0	
				5	50		0.6			3			0.6			
2SC3086 2SC3087	TO-220	800	500	3	40	5	0.3	15~50	5	1.5	8	10	0.3	18	1.0	
				5	50		0.6			3			0.6			
2SC3088 2SC3089 2SC3090	TO-3PB	800	500	4	60	5	0.3	15~50	5	1.5	8	10	0.3	18	1.0	
				7	80		0.6			3			0.6			
				10	100		1.2			6			1.2			
2SC3183 2SC3184	TO-220	900	800	0.2	25	5	0.02	10~40	5	0.1	8	10	20m	15	1.0	
					0.5		30			0.06			0.3		60m	1.0
2SC3149 2SC3150	TO-220	900	800	1.5	40	5	0.1	10~40	5	0.5	8	10	0.1	15	0.7	
					3		50			0.2			1			0.2
2SC3151 2SC3152 2SC3153	TO-3PB	900	800	1.5	60	5	0.1	10~40	5	0.5	8	10	0.1	15	0.7	
					3		80			0.2			1			0.2
					6		100			0.4			2			0.4
2SC3466		1200	650	8	120	5	1.0	10~40	5	4	6	10	1.0	5	0.7	

### Classification by h<sub>FE</sub>.

When specifying the h<sub>FE</sub> 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>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 (uS)
2SC4219 2SC4220	TO-220 MF	500	400	4	40	5	0.4	15~50	5	10	10	0.4	20	0.3	
				7	50		0.8					2			0.8
2SC4105 2SC4106 2SC4107 2SC4164	TO-220			4	40		0.4					2			0.4
				7	50		0.8					4			0.8
				10	60		1.2					6			1.2
				12	70		1.6					8			1.6
2SC4160 2SC4161 2SC4162 2SC4163	TO-220 ML			4	25		0.4					2			0.4
				7	30		0.8					4			0.8
				10	35		1.2					6			1.2
				12	40		1.6					8			1.6
2SC4108 2SC4109 2SC4110	TO-3PB	12	100	1.6	8	1.6									
		16	140	2.0	10	2.0									
		25	160	3.2	16	3.2									
2SC4423 2SC4424 2SC4425	TO-3P ML	12	55	1.6	8	1.6									
		16	60	2.0	10	2.0									
		25	65	3.2	16	3.2									
2SC4221 2SC4222	TO-220 MF	800	500	3	40	5	0.3	15~50	5	8	10	0.3	18	0.3	
				5	50		0.6					3			0.6
2SC3446 2SC3447	TO-220			3	40		0.3					1.5			0.3
				5	50		0.6					3			0.6
2SC3749 2SC3750	TO-220 ML			3	25		0.3					1.5			0.3
				5	30		0.6					3			0.6
2SC3448 2SC3449 2SC3450 2SC3451 2SC3988	TO-3PB			4	60		0.3					1.5			0.3
				7	80		0.6					3			0.6
				10	90		0.8					4			0.8
				15	100		1.2					6			1.2
		25	150	2.4	12	2.4									
2SC4457 2SC4458 2SC4459 2SC4460 2SC4461	TO-3P ML	4	40	0.3	1.5	0.3									
		7	45	0.6	3	0.6									
		10	50	0.8	4	0.8									
		15	55	1.2	6	1.2									
		25	65	2.4	12	2.4									
2SC3989 2SC3990 2SC3991	TO-3PBL	25	200	2.4	12	2.4									
		35	250	3.2	16	3.2									
		50	300	4.8	24	4.8									
2SC4223 2SC4224	TO-220 MF	1100	800	1.5	40	5	0.1	10~40	5	8	10	0.1	15	0.3	
				3	50		0.2					1			0.2
2SC3456 2SC3457	TO-220			1.5	40		0.1					0.5			0.1
				3	50		0.2					1			0.2
2SC3751 2SC3752	TO-220 ML			1.5	25		0.1					0.5			0.1
				3	30		0.2					1			0.2
2SC3458 2SC3459 2SC3460 2SC3461 2SC3552	TO-3PB			3	80		0.2					1			0.2
				4.5	90		0.3					1.5			0.3
				6	100		0.4					2			0.4
				8	140		0.6					3			0.6
		12	150	0.8	4	0.8									
2SC4426 2SC4427 2SC4428 2SC4429 2SC4430	TO-3PML	3	45	0.2	1	0.2									
		4.5	50	0.3	1.5	0.3									
		6	55	0.4	2	0.4									
		8	60	0.6	3	0.6									
		12	65	0.8	4	0.8									
2SC3992 2SC3993 2SC3994	TO-3PBL	12	200	0.8	4	0.8									
		16	250	1.2	6	1.2									
		25	300	1.6	8	1.6									

In addition to the above we have surface mounting (S M P package).  
These specifications are subject to change without notice.