

# FOR USE BY ELECTRICIANS OVERSEAS :

**最新トランジスタ規格表** (New Transistor Manual) lists all the transistors registered with the Electronic Industries Association of Japan (EIAJ), arranged in a manner easy to look up. We hope that you will make full use of the data provided in this manual by referring to the Japanese-English translation key given below.

型名	社名	用途	構造	最大定格 ( $T_c=25^\circ\text{C}$ )					電気的特性 ( $T_c=25^\circ\text{C}$ )										外形	備考
				$V_{ce0}$ (V)	$V_{be0}$ (V)	$I_c$ (mA)	$P_c$ (mW)	$T_c$ ( $^\circ\text{C}$ )	$I_{c0}$ 最大値 ( $\mu\text{A}$ )	直流又はパルス $h_{FE}$		バイアス		$h_{FE}$	$h_{ie}$ $h_{ie}^*$ ( $\Omega$ )	$h_{re}$ $h_{re}^*$ ( $\times 10^{-4}$ )	$h_{oe}$ $h_{oe}^*$ ( $\mu\text{S}$ )	$f_{\alpha b}$ $f_{\alpha b}^*$ (Mc)		
1	2	3	4	5					6		7		8				9	10	11	12

- 1 TYPE NUMBER
- 2 ORIGINAL MANUFACTURER
- 3 USES
- 4 MATERIAL AND STRUCTURE
- 5 MAXIMUM RATINGS
- 6  $I_{CBO}$  MAXIMUM VALUE AND  $V_{CB}$  VALUE (CRITERIA FOR MEASURING  $I_{CBO}$ )
- 7 STANDARD VALUE OF DC/PULSE  $h_{FE}$  AND  $V_{CE}$ ,  $I_C$  (CRITERIA FOR MEASURING DC/PULSE  $h_{FE}$ )
- 8 STANDARD VALUE OF  $h$  PARAMETERS AND BIAS  $V_{CB}$ ,  $I_E$  (CRITERIA FOR MEASURING  $h$  PARAMETERS)

- \* INDICATES VALUE IN GROUNDED-BASE OPERATION, OTHERWISE VALUE IN EMITTER-GROUNDED OPERATION.
- 9  $f_{\alpha b}$  OF RF CHARACTERISTIC, EXCEPT IN CASE OF \* WHICH INDICATES VALUE OF  $f_T$ .
- 10  $C_{ob}$  AND  $r_{bb'}$  OF RF CHARACTERISTICS EXCEPT IN CASE OF \* IN  $r_{bb'}$  COLUMN WHICH INDICATES VALUE OF  $h_{ie}$  (real)
- 11 OUTLINE
- 12 REMARKS

:とコンプリ: COMPLEMENTARY TO .....

型名	社名	用途	構造	最大定格 (T <sub>a</sub> = 25°C)					電 気 的 特 性 (T <sub>a</sub> = 25°C)											外 形	備 考		
				V <sub>CEO</sub> (V)	V <sub>EB0</sub> (V)	I <sub>C</sub> (mA)	P <sub>C</sub> (mW)	T <sub>J</sub> (°C)	I <sub>CB0</sub> 最大値		直流又はパルス h <sub>FE</sub>		バイアス		h <sub>FE</sub> h <sub>β</sub> *	h <sub>ie</sub> h <sub>iβ</sub> * (Ω)	h <sub>re</sub> h <sub>rβ</sub> * (×10 <sup>-4</sup> )	h <sub>oe</sub> h <sub>oβ</sub> * (μΩ)	f <sub>αβ</sub> f <sub>T</sub> * (Mc)			C <sub>ob</sub> (pF)	r <sub>bb</sub> h <sub>ie</sub> (real)* (Ω)
									(μA)	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	V <sub>CE</sub> (V)	I <sub>E</sub> (mA)										
2SC2592	松下	PA	Si.EP	180	5	1 A	20W (T <sub>c</sub> =25°C)	150			65-330	10	150	10	-50				250*			286	2SA1112 ヒコソフ社
" 2593																							
" 2594	松下	AF.PA	Si.EP	40	7	5 A	10W (T <sub>c</sub> =25°C)	150	0.1	10	150-450	2	500	6	-50				150*	30		236	
" 2595	"	PA	"	36	3	I <sub>CM</sub> 1.2A	10W (T <sub>c</sub> =25°C)	175	100	15	50	10	100	10	-100	P <sub>α</sub> = 0.9W, η = 45% (f = 840MHz, V <sub>CE</sub> = 12.5V, P <sub>i</sub> = 0.1W)			4000*	5		338	
" 2596	"	"	"	36	3	I <sub>CM</sub> 4 A	20W (T <sub>c</sub> =25°C)	175	1 mA	15	50	10	200	10	-200	P <sub>α</sub> = 3.5W, η = 55% (f = 840MHz, V <sub>CE</sub> = 12.5V, P <sub>i</sub> = 0.8W)			1500*	20		338	
" 2597	"	"	"	36	3	I <sub>CM</sub> 6 A	30W (T <sub>c</sub> =25°C)	175	2 mA	15	50	10	500	10	-500	P <sub>α</sub> = 9W, η = 50% (f = 840MHz, V <sub>CE</sub> = 12.5V, P <sub>i</sub> = 3W)			900*			338	
" 2598	富士通	Diff.SW	Si.P	20	3	70	200 / unit	175	0.5	10	80	3	10			h <sub>FE1</sub> / h <sub>FE2</sub> = 0.6 - 1.0		5000*		50*	284B		
" 2599	"	RF.LN	Si.EP	20	3	20	200	175	0.5	10	80	8	7			NF = 2.7dB (8V, 3mA, f = 4GHz)					262		
" 2600	"	RF	"	25	2.5	40	350	200	1	15	80	12	20			P <sub>α</sub> = 17dBm, P <sub>i</sub> = 9dBm (f = 4GHz, V <sub>CE</sub> = 12V, I <sub>C</sub> = 20mA)		6000*			170		
" 2601																							
" 2602	三菱	AF.LN	Si.EP	70	5	200	500	125	0.1	70	250-1200	6	1	6	-10	V <sub>MO</sub> < 300mV (10V, 1mA, R <sub>L</sub> = 100kΩ, A <sub>v</sub> = 80dB)			180*	7		138B	
" 2603	"	"	"	50	6	200	300	125	0.1	50	90-800	6	1	6	-10	NF < 15dB (1kHz, 6V, 0.1mA)			200*	3.5		175	
" 2604	日立	RF.LN	Si.E	30	5	100	200	125	0.5	18	250	12	2	12	-2	NF = 3dB (6V, 0.1mA, 120Hz)			230*	2.5	C <sub>ext</sub> 12pS	138	
" 2605	"	"	"	50	5	100	200	125	0.5	18	250	12	2	12	-2	NF = 3dB (6V, 0.1mA, 120Hz)			230*	2.8	C <sub>ext</sub> 12pS	138	
" 2606	ソニー	RF	Si.T	300	8	50	950	120	0.2	200	60-280	5	3	10	-2				30*	2		174B	
" 2607	サンケン	PA	Si.TMe	200	6	15A	150W (T <sub>c</sub> =25°C)	150	100	200	>30	4	5 A	12	-500	t <sub>on</sub> = 0.3μs, t <sub>f</sub> = 0.4μs t <sub>off</sub> = 2.4μs			20*			102	2SA1116 ヒコソフ社
" 2608	"	"	"	200	6	17A	200W (T <sub>c</sub> =25°C)	150	100	200	>20	4	8 A	12	-1 A	t <sub>on</sub> = 0.5μs, t <sub>f</sub> = 0.6μs t <sub>off</sub> = 1.8μs			20*			102	2SA1117 ヒコソフ社
" 2609	三菱	RF.PA	Si.EP	55	4	15A	170W (T <sub>c</sub> =25°C)	175	10mA	35	50	25	200			P <sub>α</sub> = 110W, η = 60% (f = 220MHz, V <sub>CE</sub> = 28V, P <sub>i</sub> = 25W)						303	
" 2610	日立	RF	Si.T	300	5	100	800	150		I <sub>CEO</sub> 1	V <sub>CE</sub> 250	30-200	20	20	20	-20			80*	< 4		251	
" 2611	"	"	"	300	5	100	1.25W	150		I <sub>CEO</sub> 1	V <sub>CE</sub> 250	30-200	20	20	20	-20			80*	< 4		160	
" 2612	"	SW	"	500	7	3 A	30W (T <sub>c</sub> =25°C)	150	100	400	>15	5	1.5A			t <sub>on</sub> < 1μs, t <sub>f</sub> < 1μs t <sub>off</sub> < 2.5μs						268	
" 2613	"	"	"	500	7	5 A	40W (T <sub>c</sub> =25°C)	150	100	400	>15	5	2.5A			t <sub>on</sub> < 1μs, t <sub>f</sub> < 1μs t <sub>off</sub> < 2.5μs						268	
" 2614	"	"	"	500	7	5 A	60W (T <sub>c</sub> =25°C)	150	100	400	>15	5	2.5A			t <sub>on</sub> < 1μs, t <sub>f</sub> < 1μs t <sub>off</sub> < 2.5μs						332	
" 2615	"	"	"	500	7	8 A	80W (T <sub>c</sub> =25°C)	150	100	400	>15	5	4 A			t <sub>on</sub> < 1μs, t <sub>f</sub> < 1μs t <sub>off</sub> < 2.5μs						332	
" 2616	"	"	"	500	7	10A	100W (T <sub>c</sub> =25°C)	150	100	400	>15	5	5 A			t <sub>on</sub> < 1μs, t <sub>f</sub> < 1μs t <sub>off</sub> < 2.5μs						102	
" 2617	"	"	"	500	7	15A	125W (T <sub>c</sub> =25°C)	150	100	400	>15	5	7.5A			t <sub>on</sub> < 1μs, t <sub>f</sub> < 1μs t <sub>off</sub> < 2.5μs						102	
" 2618	"	RF.AF	Si.EP	35	4	500	150	125	0.5	20	60-320	3	10	6	-1				50*	5	9*	176	
" 2619	"	"	"	30	5	100	150	125	0.5	20	35-200	12	2	12	-2	NF = 5dB (6V, 2mA, 1MHz)			230*	< 3.5	40	176	
" 2620	"	RF.Osc	"	30	4	26	100	125	0.5	10	35-200	6	1	6	-1				940*	0.9	C <sub>ext</sub> 15pS	176	
" 2621	三洋	RF.PA	Si.TP	300	6.5	200	10W (T <sub>c</sub> =25°C)	150	1	200	40-200	10	10	30	-10				>50*	< 5		296	