

# 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 <sub>b</sub> =25°C)					電気的特性 (T <sub>b</sub> =25°C)										外形	備考
				V <sub>ceo</sub> (V)	V <sub>ceo</sub> (V)	I <sub>c</sub> (mA)	P <sub>c</sub> (mW)	T <sub>j</sub> (°C)	I <sub>ceo</sub> 最大値 (μA)	直流又はパルスI <sub>BE</sub>		バイアス		h <sub>FE</sub>	h <sub>FE</sub> h <sub>FE</sub> * (Ω)	h <sub>FE</sub> h <sub>FE</sub> * (×10 <sup>-4</sup> )	h <sub>FE</sub> h <sub>FE</sub> * (μS)	f <sub>αB</sub> f <sub>r</sub> * (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<sub>CBO</sub> MAXIMUM VALUE AND V<sub>CB</sub> VALUE (CRITERIA FOR MEASURING I<sub>CBO</sub>)
- 7 STANDARD VALUE OF DC/PULSE h<sub>FE</sub> AND V<sub>CE</sub>, I<sub>C</sub> (CRITERIA FOR MEASURING DC/PULSE h<sub>FE</sub>)
- 8 STANDARD VALUE OF h PARAMETERS AND BIAS V<sub>CB</sub>, I<sub>E</sub> (CRITERIA FOR MEASURING h PARAMETERS)

- \* INDICATES VALUE IN GROUNDED-BASE OPERATION, OTHERWISE VALUE IN EMITTER-GROUNDED OPERATION.
  - 9 f<sub>αB</sub> OF RF CHARACTERISTIC, EXCEPT IN CASE OF \* WHICH INDICATES VALUE OF f<sub>r</sub>.
  - 10 C<sub>ob</sub> AND r<sub>bb'</sub> OF RF CHARACTERISTICS EXCEPT IN CASE OF \* IN r<sub>bb'</sub> COLUMN WHICH INDICATES VALUE OF h<sub>ie</sub> (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>CB0</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>ie</sub>	h <sub>ie</sub> * (Ω)	h <sub>re</sub>	h <sub>re</sub> * (×10 <sup>-4</sup> )	h <sub>oe</sub>	h <sub>oe</sub> * (μT)	f <sub>αβ</sub> f <sub>T</sub> * (Mc)	C <sub>ob</sub> (pF)	τ <sub>bb</sub> h <sub>ie(rea)</sub> * (Ω)					
									μA	V <sub>CB</sub> (V)	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	V <sub>CB</sub> (V)	I <sub>E</sub> (mA)	h <sub>fb</sub> *											h <sub>ib</sub> *	h <sub>ib</sub> * (Ω)			
2SC1901	富士通	RF	Si.EP	25	3	20	200	175	0.1	12	150	8	5								1400*	1.2	40*	84C						
" 1902	"	"	"	40	3	300	500	175	0.1	35	80	14	55								650*	2.8	25*	84C						
" 1903	"	AF.RF	"	150	5	50	1W	150	1	140	150	5	10	5	-10						130*	2	70*	328						
" 1904	"	"	"	150	5	50	1W	150	1	140	150	5	10	5	-10						130*	2	70*	328						
" 1905	松下	PA	Si.TP	350	7	200	15W (T <sub>c</sub> =25°C)	150	10	300	100	10	50	30	-20						45*	7.5	10	268						
" 1906	日立	RF.Conv.	Si.EP	30	2	50	300	125	0.5	10	>40	10	10	10	-10	V <sub>osc</sub> = 550mV (f = 275MHz, V <sub>CE</sub> = 9V, I <sub>C</sub> = 7mA)				1000*	1	C <sub>rss</sub> * 10pS	138							
" 1907	"	Osc.RF	"	30	2	50	300	125	0.5	10	>40	10	10	10	-10	V <sub>osc</sub> = 630mV (f = 930MHz, V <sub>CE</sub> = 10V, I <sub>C</sub> = 10mA)				1100*	1	C <sub>rss</sub> * 10pS	138							
" 1908	ソニー	RF	Si.E	30	4	30	500	120	1	25	80	6	1	6	-1						200*	2	C <sub>rss</sub> * 25pS	138	2SA925 とコンパリ					
" 1909	日電	PA	"	75	4	3A	10W (T <sub>c</sub> =25°C)	150	10	40	60	10	500	10	-150	P <sub>o</sub> = 5.5W (f = 27MHz, V <sub>CE</sub> = 12V, P <sub>i</sub> = 0.2W)				160*	50	4	268							
" 1910	東芝	Diff	Si.EP	15	2	80	200/unit	175	0.1	5	75	3	50	5	-30	ΔV <sub>BE</sub> < 30mV, γΔV <sub>BE</sub> < 0.2mV/°C (3V, 50mA)				7000*	1.1	15*	282A							
" 1911	"	"	"	20	2	30	150/unit	175	0.1	10	80	5	10	5	-10	ΔV <sub>BE</sub> < 15mV, γΔV <sub>BE</sub> < 0.1mV/°C (5V, 10mA)				6500*	0.66	15*	282A							
" 1912	"	"	"	20	2	30	150/unit	175	0.1	10	80	5	10	5	-10	ΔV <sub>BE</sub> < 15mV, γΔV <sub>BE</sub> < 0.1mV/°C (5V, 10mA)				6500*	0.66	15*	282R							
" 1913	松下	RF	"	150	5	1A	15W (T <sub>c</sub> =25°C)	150	10	130	150	10	150	10	-50						120*	20	3k	268						
" 1914	三菱	AF.RF	"	90	5	50	200	125	0.1	50	250-1200	6	1	6	-1						150*	1.8		138B						
" 1915	"	"	"	120	5	50	800	135	1	100	150-800	10	10	10	-10						200*	2.3		242	2SA905 とコンパリ					
" 1916																														
" 1917																														
" 1918																														
" 1919	三菱	LN	Si.EP	50	5	30	200	125	0.1	50	250-1200	6	1	6	-1	NF = 0.9dB (5V, 100μA, 10Hz)				150*	1.9		138B							
" 1920	東芝	Diff	"	15	2	80	200/unit	175	0.1	5	75	3	30	5	-30	ΔV <sub>BE</sub> < 30mV, γΔV <sub>BE</sub> < 0.2mV/°C (3V, 50mA)				7000*	1.1	15*	282B							
" 1921	日立	RF	Si.T	250	5	50	600	150	1	120	30-300	6	10	6	-10						130*	3	25*	251						
" 1922	"	SW	"	1500	6	2.5A	50W (T <sub>c</sub> =25°C)	150	10	600				5	-400	t <sub>r</sub> < 1μS				5*	90	15	102	水平偏向用						
" 1923	東芝	RF.Conv. Mix.Osc	Si.EP	40	4	20	100	125	0.5	18	40-200	6	1	6	-1	NF = 2.5dB (100MHz)				550*	C <sub>re</sub> 0.7	C <sub>rss</sub> * < 30pS	138							
" 1924	日電	Diff.SW	Si.E	20	3	50	300	200	0.1	10	30-300	5	10	5	-15						3000*	C <sub>re</sub> 1.1		309B	2素子複合					
" 1925	"	"	"	20	3	50	300	200	0.1	10	30-300	5	10	5	-15	h <sub>FE1</sub> /h <sub>FE2</sub> = 0.8-1.0 ΔV <sub>BE</sub> < 10mV (5V, 10mA)				3000*	C <sub>re</sub> 1.1		309A	2素子複合						
" 1926	"	"	"	30	3	50	200/unit	200	0.05	15	80	10	10	10	-10	h <sub>FE1</sub> /h <sub>FE2</sub> = 0.8-1.0				2000*	C <sub>re</sub> 1.1		309B	2素子複合						
" 1927	"	"	"	30	3	50	300	200	0.05	15	80	10	10	10	-10					2000*	C <sub>re</sub> 1.1		309A	2素子複合						
" 1928																														
" 1929	松下	PA	Si.P	300	6	400	25W (T <sub>c</sub> =25°C)	150	10	300	150	5	100	10	-100						80*	12	15	268						
" 1930	富士通	RF	Si.EP	16	3	30	150	175	0.1	10	80	3	10	6	-20						8000*	0.3	30*	284						