

# 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>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> * (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 氣 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 hFE				バ イ ア ス		h <sub>fe</sub>	h <sub>ie</sub> (Ω)	h <sub>re</sub> (×10 <sup>-4</sup> )	h <sub>oe</sub> (μU)	f <sub>βB</sub> (Mc)			C <sub>os</sub> (pF)	r <sub>bb</sub> (Ω)
									V <sub>CE(V)</sub>	I <sub>CB(mA)</sub>	V <sub>CE(V)</sub>	I <sub>E(mA)</sub>	V <sub>BE(V)</sub>	I <sub>E(mA)</sub>	h <sub>fe</sub> *	h <sub>ie</sub> *									
★ 2SB 40	東 芝	SW	Ge. A	-40	-12	-100	80	75	-10	-12	100	-1	-100	-6	1			i <sub>r</sub> =0.55μS, i <sub>f</sub> =0.35μS i <sub>s</sub> =0.6μS	>0.7	<50	<180	12A			
★ " 41	富士通	PA	"	-40	-12	-1.2A	44W (T <sub>e</sub> =25°C)	91	-2mA	-30	65	-1.5	-1A	-14.4	50			PG = 30dB P <sub>o</sub> =10W (B級 PP Z <sub>L</sub> =24Ω)				102	2S 41		
★ " 42	"	"	"	-60	-12	-1.2A	44W (T <sub>e</sub> =25°C)	91	-2mA	-30	65	-1.5	-1A	-14.4	50			PG = 30dB P <sub>o</sub> =10W (B級 PP Z <sub>L</sub> =24Ω)				102	2S 42		
★ " 43	東 芝	"	"	-25	-12	-50	150	75	-10	-12	70	-1	-50	-6	1				1	35		12A			
★ " 43A	"	"	"																			12A			
★ " 44	"	AF	"	-30	-12	-50	80	75	-10	-12				-6	1	85	2500	5	30	>0.5	30		12A	2S 44	
" 46	"	"	"	-25	-12	-50	80	75	-5	-12				-6	1	140	4200	6	30		35		12A	2S 46	
" 47	"	LN	"	-25	-12	-50	80	75	-14	-25				-6	1	140	4200	6	30	NF < 5dB (f = 1kc)			12A	2S 47	
★ " 48	ソニー	AF. PA	"	-16		-100	140	65	-16	-16	43	-1	-20	-6	1	-0.973*	28*	8*	0.6*	2.5	25		84A	2T 31	
★ " 49	"	"	"	-16		-100	140	65	-16	-16	83	-1	-20	-6	1	-0.985*	28*	8*	0.6*	3.0	25		84A	2T 31	
★ " 50	"	"	"	-16		-100	140	65	-16	-16	131	-1	-20	-6	1	-0.990*	28*	8*	0.6*	3.5	25		84A	2T 31	
★ " 51	"	PA	"	-30	-3	-200	200	85	-16	-25	43	-1	-20	-6	1	-0.973*	28*	8*	0.6*	2.0	25		84A	2T 32	
★ " 52	"	"	"	-30	-3	-200	200	85	-16	-25	83	-1	-20	-6	1	-0.985*	28*	8*	0.6*	3.0	25		84A	2T 32	
★ " 53	"	"	"	-30	-15	-250	200	85	-10	-30	70	-1	-20	-6	1	-0.982*	28*	7*	0.6*	3.0	25		84A	2T 38	
" 54	東 芝	AF	"	-30	-12	-150	150	75	-14	-30				-6	1	80-300	4200	6	30	1*	35	120	12A	2S 54	
★ " 55	"	PA	"	-60	-12	-50	150	75	-14	-25	80	-1	-50	-6	1				1	35		12A	2S56A		
" 56	"	"	"	-30	-12	-150	150	75	-14	-30	80	-1	-50	-6	1				1	35	120	12A	2S 56		
" 56A	"	"	"	-45	-12	-150	150	75	-14	-25	80	-1	-50	-6	1				1	35		12A			
★ " 57	富士通	AF	"	-30	-10	-100	100	70	-15	-30				-6	1	70	30*	3*	0.3*				78		
★ " 58	"	"	"	-12	-2.5	-50	100	70	-15	-12				-6	1	-0.98*	30*	3*	0.3*				78		
★ " 59	"	SW	"	-30	-10	-100	150	85	-15	-30	70	-1	-50										12A		
★ " 60	"	AF	"	-20	-2.5	-50	150	85	-14	-12				-6	1	70	30*	3*	0.3*				12A		
★ " 60A	"	"	"	-20	-2.5	-50	150	85	-14	-12	70	-1	-50										12A		
★ " 61	"	"	"	-30	-12	-50	150	85	-10	-30				-6	1	85	3000	7	30	1	40		12A	2S 61	
★ " 62	東 芝	PA	"	-60	-12	-500	2W (T <sub>e</sub> =55°C)	75	-70	-12	60	-1	-500	-1	100					0.4			101		
" 63	"	"	"	-32	-12	-500	2W (T <sub>e</sub> =55°C)	75	-70	-12	60	-1	-500	-1	100					0.4			101		
" 64	"	"	Ge. D	-100	-1	-6A	25W (T <sub>e</sub> =25°C)	75	-330	-12	70	-1.5	-1A	-1.5	500					1			102		
★ " 65	富士通	SW	Ge. A	-30	-12	-100	150	85	-15	-30				-6	1	65	i <sub>r</sub> =3μS, i <sub>f</sub> =4μS i <sub>s</sub> =3μS		1	40		12A	2S 65		
★ " 66	日 立	AF	"	-30	-12	-50	100	85	-15	-30				-6	1	-0.984*	30*	< 8*	0.38*	PG > 24dB (f = 1kc)			12A	2S 11 2N215C	
★ " 67	"	PA	"	-55	-12	-150	350 (散熱板付)	70	-10	-12	63	-1	-150	-6	1	45	1360	2.1	21	1	45	70	66	2S193 HJ 43	