● High h_{FE} Transistor with High-Current Resistors

Type No.	Application	Structure	Max. ratings						Electrical characteristics									Package outline	Remarks
									Bias			Bias							
			V_{CBO} (V)	V_{CEO} (V)	V_{EBO} (V)	I_C (mA)	P_C (mW)	T_j (°C)	V_{CE} (V)	I_C (mA)	h_{FE}	V_{CE} (V)	I_C (mA)	$V_{I(ON)}$ (V)	R_1 (kΩ)	R_2 (kΩ)	f_T (MHz)		
RT1P137L	LSS	Si,PNP,E	−40	−40	−6	−1A	900	150	−6	−100	more than 100	−0.2	−300	less than −4	1	22	130	TO-92L	
RT1P137P	LSS	Si,PNP,E	−40	−40	−6	−1A	500		−6	−100		−0.2	−300		1	22		SOT-89	
RT1N137L	LSS	Si,NPN,E	40	40	6	1A	900		6	100	more than 200	0.2	300	less than 4	1	22	150	TO-92L	
RT1N137P	LSS	Si,NPN,E	40	40	6	1A	500		6	100		0.2	300		1	22		SOT-89	

● Dual Transistors

Type No.	Application	Structure	Max. ratings						Electrical characteristics								Package outline	Remarks
									Bias						I_{CBO} (max)			
			V_{CBO} (V)	V_{CEO} (V)	V_{EBO} (V)	I_C (mA)	P_C (mW)	T_j (°C)	V_{CE} (V)	I_C (mA)	h_{FE}	f_T (typ) (MHz)	Cob (typ) (pF)	Cor'b (typ) (ps)	Bias V_{CB} (V)	(μA)		
2SC5168	Differential amplifier	Si,NPN,E	50	50	5	100	200	+125	6	1	250 to 800	150	2.5	−	35	0.1	5P5	
2SC5169	Differential amplifier	Si,NPN,E	100	100	5	50	200	+125	6	1	250 to 1200	150	1.8	−	70	0.1	5P5	
2SC5170	Fixed current circuit	Si,NPN,E	100	100	5	100	200	+125	6	1	250 to 800	100	2.5	−	100	0.1	5P5	
2SA1927	Differential amplifier	Si,PNP,E	−50	−50	−5	−100	200	+125	−6	−1	250 to 800	100	3	−	−35	−0.1	5P5	
2SA1928	Differential amplifier	Si,PNP,E	−100	−100	−5	−50	200	+125	−6	−1	250 to 800	150	2.5	−	−70	−0.1	5P5	
2SA1929	Fixed current circuit	Si,PNP,E	−100	−100	−5	−100	200	+125	−6	−1	250 to 800	100	3	−	−100	−0.1	5P5	

■LOW FREQUENCY POWER TRANSISTORS

● Medium-Power Switchings

〈T_a=25°C〉

Type No.	Application	Structure	Max. ratings						Electrical characteristics							Package outline	Remarks
									Bias					I_{CBO} (max)			
			V_{CBO} (V)	V_{CEO} (V)	V_{EBO} (V)	I_C (A)	P_C (W)	T_j (°C)	V_{CE} (V)	I_C (mA)	h_{FE}	f_T (typ) (MHz)	Cob (typ) (pF)	Bias V_{CB} (V)	(μA)		
2SB1314	LSS	Si,PNP,EP	−60	−60	−7	−3	15	+150	−5	−500	150 to 500	100	−	−50	−1	SC-67	TO-220F
2SD1972	LSS	Si,NPN,EP	60	60	7	3	15	+150	5	500	250 to 800	90	−	50	1	SC-67	TO-220F

Note 1 : Items shown in the table on the right are classified according to h_{FE} value.

Item	E	F	G
h_{FE}	150 to 300	250 to 500	400 to 800

■FIELD EFFECT TRANSISTORS

● Junction type

Type No.	Application	Structure	Max. ratings				Electrical characteristics							Package outline	Remarks
							Bias								
			V_{GDO} (V)	I_G (mA)	P_T (mW)	Tch (°C)	V_{DS} (V)	V_{GS} (V)	I_{DSS} (mA)	$\lvert y_{fs}\rvert$ (typ) (ms)	V_{GS} (off) (max) (V)	Crss (typ) (pF)	I_{GSS} (max) (nA)		
2SJ40	LVA-SW	P-J	50	−10	300	+125	−10	0	−1 to 12	4	6	3.5	1	Small 3pin	RDS (ON) = 220Ω
2SJ125	LVA-SW	P-J	50	−10	150	+125	−10	0	−1 to 12	4	6	3.3	1	SC-59	RDS (ON) = 220Ω High density mounting
2SJ145	LVA-SW	P-J	50	−10	150	+125	−10	0	−1 to 12	4	6	3.3	1	SC-70	RDS (ON) = 220Ω High density mounting
2SJ498	LVA-SW	P-J	50	−10	300	+125	−10	0	−1 to 12	4	6	3.5	1	Small 3pin	Frame type (for 2SJ40)
2SK108	LVA-SW	N-J	−50	10	300	+125	10	0	1 to 12	15	−3	4.0	1	SC-43	NF = 1.0dB RDS (ON) = 60Ω
2SK381	LVA-SW	N-J	−50	10	300	+125	10	0	0.3 to 12	3	−6	1.5	1	Small 3pin	RDS (ON) = 250Ω
2SK433	LVA-SW	N-J	−50	10	150	+125	10	0	1 to 12	3	−6	1.5	1	SC-59	RDS (ON) = 250Ω High density mounting
2SK492	LVA-SW	N-J	−50	10	150	+125	10	0	1 to 12	15	−3	4.0	1	SC-59	RDS (ON) = 70Ω High density mounting
2SK930	LVA-SW	N-J	−50	10	150	+125	10	0	1 to 12	3	−6	1.5	1	SC-70	RDS (ON) = 250Ω Super mini-chip
2SK2880 ★★	LVA-SW	N-J	−50	10	300	+125	10	0	0.3 to 12	3	−6	1.5	1	Small 3pin	Frame type (for 2SK381)
2SK2881 ★★	LVA-SW	N-J	−50	10	300	+125	10	0	1 to 12	15	−3	4.0	1	Small 3pin	Frame type (for 2SK108)

Note 1 : Items shown in the table on the right are classified according to I_{DSS} value.

Item	A	B	C	D	E	F	G
I_{DSS} (mA)	0.3 to 0.8	0.6 to 1.5	1 to 3	2.5 to 6	5 to 12	10 to 20	17 to 35

★ : New product ★★ : Under development