

瑞萨 晶体管/晶闸管/三端双向可控硅开关 状态表



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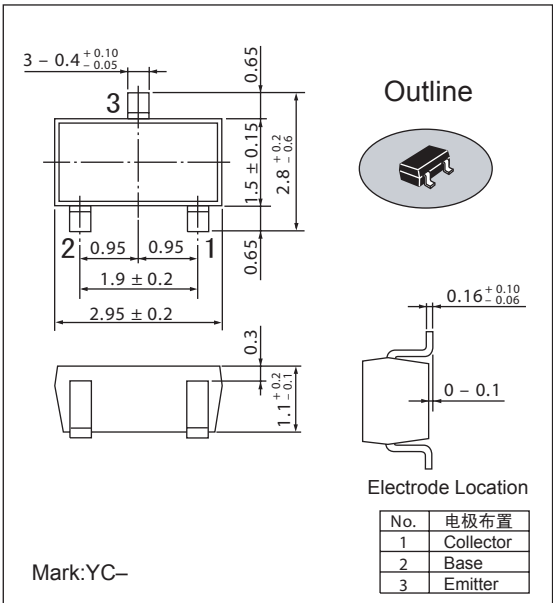
中功率放大用 高频硅双极晶体管

『2SC5998』

特点

- 通过硅高耐压工艺的应用，实现了高频特性的高性能化
 - ・同时实现高 f_T ($f_T=11\text{ GHz}$)、高耐压 ($V_{CE0}=5\text{ V}$)
 - ・高增益(最大可用增益：MAG=22 dBtyp.)
 - ・高效率(附加效率：PAE=70% typ.)
- 小型树脂模塑封装 (MPAK)

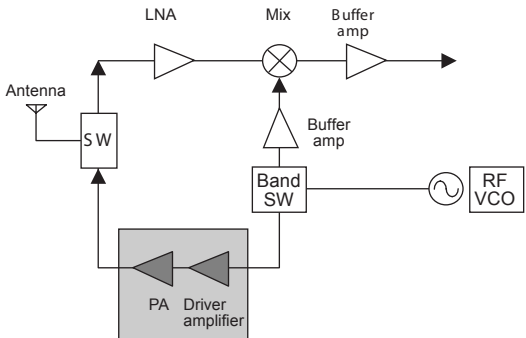
外形尺寸图



应用举例

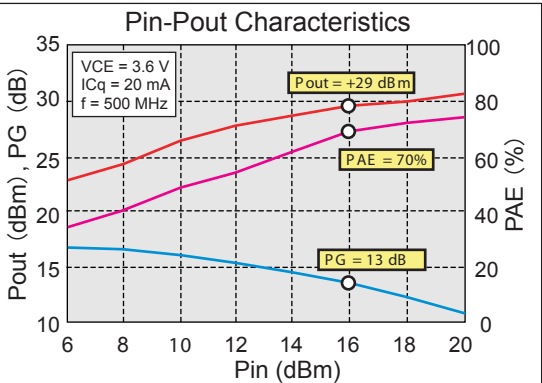
- 用于到1 GHz为止的功率放大器、激励放大器
 - ・FRS (Family Radio Service) 功率放大器
 - ・GMRS (General Mobile Radio Service) 激励放大器

☆ FRS $f = 460\text{ MHz}$



主要电特性

Item	Test Condition	Spec	Unit
hFE	VCE = 3V, IC = 100mA	110 to 190	—
Cre	VCB = 3V, IE = 0, f = 1MHz	0.95 typ.	pF
fT	VCE = 3.6V, IC = 100mA, f = 1GHz	11 typ.	GHz
MAG	VCE = 3.6V, IC = 100mA, f = 500MHz, Pin = +16 dBm	22 typ.	dB
PG	VCE = 3.6V, ICq = 20mA, f = 500MHz, Pin = +16 dBm	13 typ.	dB
P1dB	VCE = 3.6V, ICq = 20mA, f = 500MHz	+26 typ.	dBm
PAE	VCE = 3.6V, ICq = 20mA, f = 500MHz, Pin = +16 dBm	70 typ.	%



产品信息: <http://www.renesas.com/en/transistor>

最新的Data Sheet请参阅上述网页。

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■2SA Series

Type No.	Package	Page
673	TO-92(1)	6
673A	TO-92(1)	6
673A(K)	TO-92(1)	7
778(K)	TO-92(1)	7
778A(K)	TO-92(1)	7
836	TO-92(1)	6
844	TO-92(1)	6
872A	TO-92(1)	6
893	TO-92(1)	6
893A	TO-92(1)	6
1029	TO-92(1)	6
1030	TO-92(1)	6
1052	MPAK	6
1082	TO-92(1)	6
1084	TO-92(1)	6
1085	TO-92(1)	6
1121	MPAK	6
1122	MPAK	6
1171	MPAK	6
1188	TO-92(1)	6
1190	TO-92(1)	6
1191	TO-92(1)	6
1193(K)	TO-92MOD	7
1484	MPAK	6
1566	MPAK	6
1617	MPAK	6
2080	CMPAK	6
2081	CMPAK	6

■2SB Series

Type No.	Package	Page
561	TO-92(1)	6
562	TO-92MOD	6
566(K)	TO-220AB	10
566A(K)	TO-220AB	10
647	TO-92MOD	6
647A	TO-92MOD	6
715	TO-92MOD	6
716	TO-92MOD	6
716A	TO-92MOD	6
727(K)	TO-220AB	10
738	TO-92MOD	6
739	TO-92MOD	6
740	TO-92MOD	6
791(K)	TO-220AB	10
831	MPAK	6
857	TO-220AB	10
858	TO-220AB	10
859	TO-220AB	10
860	TO-220AB	10
861	TO-220AB	10
955(K)	TO-220AB	10
1001	UPAK	7
1002	UPAK	7
1025	UPAK	7
1026	UPAK	7
1028	UPAK	7
1032(K)	TO-3P	10
1048	UPAK	7
1079	TO-3P	10
1091	TO-220AB	10
1103	TO-220AB	10
1389	TO-220FM	10
1390	TO-220FM	10
1391	TO-220FM	10
1392	TO-220FM	10
1399	TO-220FM	10
1400	TO-220FM	10
1407(L)	DPAK(L)-(1)	10
1407(S)	DPAK(S)	10
1409(L)	DPAK(L)-(1)	10
1409(S)	DPAK(S)	10
1494	TO-3P	10
1530	TO-220FM	10
1688	TO-92(1)	6
1691	MPAK	6

■2SC Series

Type No.	Package	Page
458	TO-92(1)	6
458(K)	TO-92(1)	7
458LG	TO-92(1)	6
460	TO-92(2)	7
461	TO-92(2)	7
535	TO-92(2)	7
1213	TO-92(1)	6
1213A	TO-92(1)	6
1213A(K)	TO-92(1)	7
1214	TO-92(1)	6
1344	TO-92(1)	6
1345	TO-92(1)	6
1345(K)	TO-92(1)	7
1472(K)	TO-92(1)	7
1515(K)	TO-92(1)	7
1775	TO-92(1)	6
1775A	TO-92(1)	6
1881(K)	TO-220AB	10
1890	TO-92(1)	6
1890A	TO-92(1)	6
1906	TO-92(2)	7
1907	TO-92(2)	7
1921	TO-92MOD	6

■2SC Series

Type No.	Package	Page
2308	TO-92(1)	6
2309	TO-92(1)	6
2310	TO-92(1)	6
2396	TO-92(1)	6
2462	MPAK	6
2463	MPAK	6
2471	TO-92(2)	7
2512	TO-92(2)	7
2543	TO-92(1)	6
2544	TO-92(1)	6
2545	TO-92(1)	6
2546	TO-92(1)	6
2547	TO-92(1)	6
2610	TO-92MOD	6
2612	TO-220AB	10
2613	TO-220AB	10
2618	MPAK	6
2619	MPAK	7
2620	MPAK	7
2732	MPAK	7
2734	MPAK	7
2735	MPAK	7
2736	MPAK	7
2776	MPAK	7
2816	TO-220AB	10
2853	TO-92(1)	6
2854	TO-92(1)	6
2855	TO-92(1)	6
2856	TO-92(1)	6
2898	TO-220AB	10
2979	TO-220AB	10
3127	MPAK	7
3128	TO-92(2)	7
3336	TO-3P	10
3365	TO-3P	10
3380	UPAK	7
3510	TO-92(2)	7
3512	TO-92(2)	7
3513	MPAK	7
3793	MPAK	7
4050	MPAK	6
4196	MPAK	7
4197	MPAK	7
4260	CMPAK	7
4261	CMPAK	7
4262	CMPAK	7
4264	CMPAK	7
4265	CMPAK	7
4308	TO-92(2)	7
4366	MPAK	6
4367	TO-92MOD	6
4499(L)	DPAK(L)-(1)	10
4499(S)	DPAK(S)	10
4500(L)	DPAK(L)-(1)	10
4500(S)	DPAK(S)	10
4537	CMPAK	7
4591	MPAK	7
4593	CMPAK	7
4680	MPAK	7
4693	TO-92MOD	7
4702	MPAK	6
4784	CMPAK	7
4807	UPAK	7
4899	CMPAK	7
4901	CMPAK	7
4913	TO-220AB	10
4926	MPAK-4	7
4964	MPAK	7
4965	CMPAK	7
4988	UPAK	7
4995	CMPAK-4	7
5022	TO-220FM	10
5049	MPAK	7
5050	MPAK	7
5051	CMPAK	7
5080	MPAK-4	7

■2SD Series

Type No.	Package	Page
467	TO-92(1)	6
468	TO-92MOD	6
476(K)	TO-220AB	10
476A(K)	TO-220AB	10
655	TO-92(1)	6
667	TO-92MOD	6
667A	TO-92MOD	6
768(K)	TO-220AB	10
787	TO-92MOD	6
788	TO-92MOD	6
789	TO-92MOD	6
970(K)	TO-220AB	10
974	TO-92MOD	7
1101	MPAK	6
1113(K)	TO-220AB	10
1126(K)	TO-220AB	10
1133	TO-220AB	10
1134	TO-220AB	10
1135	TO-220AB	10
1137	TO-220AB	10
1138	TO-220AB	10
1163	TO-220AB	10
1163A	TO-220AB	10
1209(K)	TO-92MOD	7
1306	MPAK	6
1367	UPAK	7
1368	UPAK	7
1418	UPAK	7
1419	UPAK	7
1421	UPAK	7
1436(K)	TO-3P	10
1470	UPAK	7
1472	UPAK	7
1527	TO-220AB	10
1559	TO-3P	10
1606	TO-220AB	10
1922	TO-92MOD	6
1974	UPAK	7
1976	TO-220AB	10
1978	TO-92MOD	7
2046	TO-92MOD	7
2101	TO-220FM	10
2104	TO-220FM	10
2106	TO-220FM	10
2107	TO-220FM	10
2115(L)	DPAK(L)-(1)	10
2115(S)	DPAK(S)	10
2121(L)	DPAK(L)-(1)	10
2121(S)	DPAK(S)	10
2122(L)	DPAK(L)-(1)	10
2122(S)	DPAK(S)	10
2123(L)	DPAK(L)-(1)	10
2123(S)	DPAK(S)	10
2124(L)	DPAK(L)-(1)	10
2124(S)	DPAK(S)	10
2213	TO-92MOD	7
2337	TO-220FM	10
2651	TO-92(1)	6
2655	MPAK	6

■2SH Series

Type No.	Package	Page
26	TO-220AB	17
27	TO-220AB	17
28	TO-220AB	17
29	TO-220AB	17
30	TO-3P	17
31	TO-3P	17

■2SJ Series

Type No.	Package	Page
76	TO-220AB	16
77	TO-220AB	16
78	TO-220AB	16
79	TO-220AB	16
130(L)	DPAK(L)-(1)	11
130(S)	DPAK(S)	11
160	TO-3P	16
161	TO-3P	16
162	TO-3P	16
181(L)	DPAK(L)-(1)	11
181(S)	DPAK(S)	11
186	UPAK	11
216	TO-3PFM	12
217	TO-3P	12
218	TO-3PFM	12
221	TO-220AB	11
222	TO-220FM	11
244	UPAK	11
247	TO-220AB	11
248	TO-220FM	11
278	UPAK	11
317	UPAK	11
319(L)	DPAK(L)-(1)	11
319(S)	DPAK(S)	11

■2SC Series

Type No.	Package	Page
5872	MFPK	7
5890	MPAK	7
5894	CMPAK-4	7
5998	MPAK	7

■2SD Series

Type No.	Package	Page
467	TO-92(1)	6
468	TO-92MOD	6
476(K)	TO-220AB	10
476A(K)	TO-220AB	10
655	TO-92(1)	6
667	TO-92MOD	6
667A	TO-92MOD	6
768(K)	TO-220AB	10
787	TO-92MOD	6
788	TO-92MOD	6
789	TO-92MOD	6
970(K)	TO-220AB	10
974	TO-92MOD	7
1101	MPAK	6
1113(K)	TO-220AB	10
1126(K)	TO-220AB	10
1133	TO-220AB	10
1134	TO-220AB	10
1135	TO-220AB	10
1137	TO-220AB	10
1138	TO-220AB	10
1163	TO-220AB	10
1163A	TO-220AB	10
1209(K)	TO-92MOD	7
1306	MPAK	6
1367	UPAK	7
1368	UPAK	7
1418	UPAK	7
1419	UPAK	7
1421	UPAK	7
1436(K)	TO-3P	10
1470	UPAK	7
1472	UPAK	7
1527	TO-220AB	10
1559	TO-3P	10
1606	TO-220AB	10
1922	TO-92MOD	6
1974	UPAK	7
1976	TO-220AB	10
1978	TO-92MOD	7
2046	TO-92MOD	7
2101	TO-220FM	10
2104	TO-220FM	10
2106	TO-220FM	10
2107	TO-220FM	10
2115(L)	DPAK(L)-(1)	10
2115(S)	DPAK(S)	10
2121(L)	DPAK(L)-(1)	10
2121(S)	DPAK(S)	10
2122(L)	DPAK(L)-(1)	10
2122(S)	DPAK(S)	10
2123(L)	DPAK(L)-(1)	10
2123(S)	DPAK(S)	10
2124(L)	DPAK(L)-(1)	10
2124(S)	DPAK(S)	10
2213	TO-92MOD	7
2337	TO-220FM	10
2651	TO-92(1)	6
2655	MPAK	6

■2SH Series

Type No.	Package	Page
26	TO-220AB	17
27	TO-220AB	17
28	TO-220AB	17
29	TO-220AB	17
30	TO-3P	17
31	TO-3P	17

■2SJ Series

Type No.	Package	Page
76	TO-220AB	16
77	TO-220AB	16
78	TO-220AB	16
79	TO-220AB	16
130(L)	DPAK(L)-(1)	11
130(S)	DPAK(S)	11
160	TO-3P	16
161	TO-3P	16
162	TO-3P	16
181(L)	DPAK(L)-(1)	11
181(S)	DPAK(S)	11
186	UPAK	11
216	TO-3PFM	12
217	TO-3P	12
218	TO-3PFM	12
221	TO-220AB	11
222	TO-220FM	11
244	UPAK	11
247	TO-220AB	11
248	TO-220FM	11
278	UPAK	11
317	UPAK	11
319(L)	DPAK(L)-(1)	11
319(S)	DPAK(S)	11

■2SJ Series

Type No.	Package	Page
350	TO-220FM	11
351	TO-3P	16
352	TO-3P	16
386	TO-92MOD	11
387(L)	DPAK(L)-(2)	11
387(S)	DPAK(S)	11
399	MPAK	11
410	TO-220FM	11
451	MPAK	11
452	MPAK	11
471	TO-220CFM	11
479(L)	LDPAK(L)	12
479(S)	LDPAK(S)-(1)	12
483	TO-92MOD	11
484	UPAK	11
486	MPAK	11
496	TO-92MOD	11
504	TO-220FM	

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■2SK Series

Type No.	Package	Page
2940(L)	LDPAK(L)	12
2940(S)	LDPAK(S)-(1)	12
2955	TO-3P	12
2956	TO-220CFM	11
2957(L)	LDPAK(L)	12
2957(S)	LDPAK(S)-(1)	12
2958(L)	LDPAK(L)	12
2958(S)	LDPAK(S)-(1)	12
2959	TO-220AB	11
2978	UPAK	11
2980	MPAK	11
3000	MPAK	11
3069	TO-220AB	11
3070(L)	LDPAK(L)	12
3070(S)	LDPAK(S)-(1)	12
3081	TO-220AB	11
3082(L)	LDPAK(L)	12
3082(S)	LDPAK(S)-(1)	12
3134(L)	LDPAK(L)	12
3134(S)	LDPAK(S)-(1)	12
3135(L)	LDPAK(L)	12
3135(S)	LDPAK(S)-(1)	12
3136	TO-220AB	11
3140	TO-220CFM	11
3141	TO-220AB	11
3142	TO-220CFM	11
3147(L)	DPAK(L)-(2)	11
3147(S)	DPAK(S)	11
3148	TO-220FM	12
3149	TO-220AB	11
3150(L)	LDPAK(L)	12
3150(S)	LDPAK(S)-(2)	12
3151	TO-3P	12
3152	TO-220FM	12
3153	TO-220FM	12
3154	TO-220AB	11
3155	TO-220FM	12
3156	TO-220AB	11
3157	TO-220FM	12
3158	TO-220AB	11
3159	TO-3P	12
3160	TO-220FM	12
3161(L)	LDPAK(L)	12
3161(S)	LDPAK(S)-(1)	12
3162	TO-220FM	12
3163	TO-3P	12
3174A	RFPK-F	8
3177	TO-220FM	12
3209	TO-220FM	12
3210(L)	LDPAK(L)	12
3210(S)	LDPAK(S)-(1)	12
3211(L)	LDPAK(L)	12
3211(S)	LDPAK(S)-(1)	12
3212	TO-220FM	11
3214	TO-220AB	11
3228	TO-220AB	11
3229	TO-220CFM	11
3233	TO-220CFM	11
3234	TO-220CFM	11
3235	TO-3P	12
3274(L)	DPAK(L)-(1)	11
3274(S)	DPAK(S)	11
3287	MPAK	8
3288	MPAK	8
3289	CMPAK	8
3290	MPAK	8
3348	CMPAK	8
3378	CMPAK	8
3390	RP8P	8
3391	UPAK	8
3418	TO-220AB	11
3419	TO-3P	12
3446	TO-92MOD	11
3447	TO-92MOD	11
3461(L)	LDPAK(L)	12
3461(S)	LDPAK(S)-(1)	12

■3SK Series

Type No.	Package	Page
295	MPAK-4	8
296	CMPAK-4	8
297	MPAK-4	8
298	CMPAK-4	8
300	MPAK-4	8
317	CMPAK-4	8
318	CMPAK-4	8
319	MPAK-4	8

■4A Series

Type No.	Package	Page
J11	SP-12	16
K15	SP-10	16
K16	SP-10	16
K17	SP-10	16
K18	SP-10	16
K19	SP-10	16
K20	SP-10	16
K21	SP-10	16
K22	SP-10	16
K25	SP-10	16

■4A Series

Type No.	Package	Page
K26	SP-12	16
M11	SP-10	16
M12	SP-10	16
M13	SP-10	16
M14	SP-12TA	16
M15	SP-12TA	16
M17	SP-12	16

■6AM Series

Type No.	Package	Page
11	SP-12	16
12	SP-12TA	16
13	SP-12TA	16
14	SP-12TA	16
15	SP-12TA	16

■BB FET Series

Type No.	Package	Page
101C	CMPAK-4	8
101M	MPAK-4	8
102M	MPAK-4	8
301C	CMPAK-4	8
301M	MPAK-4	8
302M	MPAK-4	8
304C	CMPAK-4	8
304M	MPAK-4	8
305C	CMPAK-4	8
305M	MPAK-4	8
501C	CMPAK-4	8
501M	MPAK-4	8
502C	CMPAK-4	8
502M	MPAK-4	8
503C	CMPAK-4	8
503M	MPAK-4	8
504C	CMPAK-4	8
504M	MPAK-4	8

■BICMIC Series

Type No.	Package	Page
702C	CMPAK-4	8
702M	MPAK-4	8
703C	CMPAK-4	8
703M	MPAK-4	8

■BRT Series

Type No.	Package	Page
BRA114	ECM	6
BRA114	EMP	6
BRA114	ETP	6
BRA123	ECM	6
BRA123	EMP	6
BRA123	ETP	6
BRA124	ECM	6
BRA124	EMP	6
BRA124	ETP	6
BRA143	ECM	6
BRA143	EMP	6
BRA143	ETP	6
BRA144	ECM	6
BRA144	EMP	6
BRA144	ETP	6
BRC114	ECM	6
BRC114	ETP	6
BRC123	ECM	6
BRC123	EMP	6
BRC123	ETP	6
BRC124	ECM	6
BRC124	EMP	6
BRC124	ETP	6
BRC143	ECM	6
BRC143	EMP	6
BRA114	ECM	6
BRC143	ETP	6
BRC144	ECM	6
BRC144	EMP	6

■GN Series

Type No.	Package	Page
BRC144	ETP	6
2550V4LD	LDPAK(L)	17
2550V4LS	LDPAK(S)-(1)	17
6020V4LD	LDPAK(L)	17
6020V4LS	LDPAK(S)-(1)	17
6030V4LD	LDPAK(L)	17
6030V4LS	LDPAK(S)-(1)	17

■HSG Series

Type No.	Package	Page
2001	CMPAK-4	7

■H5N Series

Type No.	Package	Page
2001LD	LDPAK(L)	12
2001LM	LDPAK(S)-(2)	12
2001LS	LDPAK(S)-(1)	12
2003P	TO-3P	11
2004DL	DPAK(L)-(2)	11
2004DS	DPAK(S)	11
2005DL	DPAK(L)-(2)	11
2005DS	DPAK(S)	11
2301PF	TO-3PFM	12
2305P	TO-3P	12
2305PF	TO-3PFM	12
2306PF	TO-3PFM	12
2501LD	LDPAK(L)	12
2501LM	LDPAK(S)-(2)	12
2501LS	LDPAK(S)-(1)	12
2501P	TO-3P	12
2502CF	TO-220CFM	11
2503P	TO-3P	12
2504DL	DPAK(L)-(2)	11
2504DS	DPAK(S)	11
2505DL	DPAK(L)-(2)	11
2505DS	DPAK(S)	11
2507P	TO-3P	12
2508DL	DPAK(L)-(2)	11
2508DS	DPAK(S)	11
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2509PF	TO-3PFM	12
2510DL	DPAK(L)-(2)	11
2510DS	DPAK(S)	11
2513PL	TO-3PL	13
2801P	TO-3PL	13
3003P	TO-3P	12
3004P	TO-3P	12
3008P	TO-3P	12
5001FM	TO-220FM	12
5004PL	TO-3PL	13
5006DL	DPAK(L)-(2)	11
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0308LS	LDPAK(S)-(1)	12
0310LD	LDPAK(L)	12
0310LM	LDPAK(S)-(2)	12
0310LS	LDPAK(S)-(1)	12
0311LD	LDPAK(L)	12
0311LM	LDPAK(S)-(2)	12
0311LS	LDPAK(S)-(1)	12
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0312LD	LDPAK(L)	12
0312LM	LDPAK(S)-(2)	12
0312LS	LDPAK(S)-(1)	12
0401LD	LDPAK(L)	12
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1004LM	LDPAK(S)-(2)	12
1004LS	LDPAK(S)-(1)	12
1005DL	DPAK(L)-(2)	11
1005DS	DPAK(S)	11
1005FM	TO-220FM	11
1005LD	LDPAK(L)	12
1005LM	LDPAK(S)-(2)	12
1005LS	LDPAK(S)-(1)	12
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1008(L)	LDPAK(L)	16
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2002	TO-220FM	16
2005	TO-220FM	16
2007(L)	DPAK(L)-(1)	16
2007(S)	DPAK(S)	16
2011(L)	LDPAK(L)	16
2011(S)	LDPAK(S)-(1)	16
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2012(S)	LDPAK(S)-(1)	16
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1025R	FP-8DA	13
1026R	FP-8DA	13
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1033T	TTP-8D	13
1036R	FP-8DA	13
1038R/RJ	FP-8DA	13
1041T	TTP-8D	13
1043M	TSOP-6	13
1044M	TSOP-6	13
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1048R	FP-8DA	13
1053M	TSOP-6	13
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1059C	CMFPAK-6	13
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2164H	LFPAK	13
2165H	LFPAK	13
2166H	LFPAK	13
2167H	LFPAK	13
2168H	LFPAK	13
2169H	LFPAK	13
2170H	LFPAK	13
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3PM-12L	TO-220F	18
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8CM-12L	TO-220	18
8CS-12L	TO-220S	18
8KM-12LA/LB	TO-220FN	18
8KM-12LC	TO-220FN	18
8KM-14LA	TO-220FN	18
8KM-14LC	TO-220FN	18
8KM-16LA	TO-220FN	18
8KM-20LA	TO-220FN	18
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12KM-14LA	TO-220FN	18
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20SM-5	TO-3P*	15
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20SM-9	TO-3P*	15
20SM-10	TO-3P*	15
20UM-5	TO-220	15
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18KM-10A	TO-220FN	14
20KM-5A	TO-220FN	14
20KM-6A	TO-220FN	14
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50SMJ-2	TO-3P*	14
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50UMJ-06	TO-220	14
50UMJ-2	TO-220	14
50UMJ-3	TO-220	14
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50VS-2	TO-220S	14
50VS-3	TO-220S	14
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50VSJ-06	TO-220S	14
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70KM-06	TO-220FN	14
70KM-2	TO-220FN	14
70KMJ-03	TO-220FN	14
70KMJ-03F	TO-220FN	14
70KMJ-06	TO-220FN	14
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70SMJ-03	TO-3P*	14
70SMJ-06	TO-3P*	14
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70UM-2	TO-220	14
70UMH-03	TO-220	14
70UMJ-03	TO-220	14
70UMJ-06	TO-220	14
70UMJ-06F	TO-220	14
70UMJ-2	TO-220	14
70VS-06	TO-220S	14
70VS-2	TO-220S	14
70VSH-03	TO-220S	14
70VSJ-03	TO-220S	14
70VSJ-06	TO-220S	14
70VSJ-2	TO-220S	14
70VSJ-03	TO-220S	14
100KMJ-03	TO-220FN	14
100KMJ-03F	TO-220FN	14
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100UM-03	TO-220	14
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Small Signal Transistors

■General Amplification

Package	Type No.	Ratings		Characteristics		Status
		V _{CEO} (V)	I _C (A)	hFE	V _{CE(sat)} (V) max	
TO-92(1)	2SB561	-20	-0.7	85~240	-0.5	○
	2SA1029	-30	-0.1	100~500	-0.2	○
	2SA673	-35	-0.5	60~320	-0.6	○
	2SA1030	-50	-0.1	100~320	-0.2	○
	2SA673A	-50	-0.5	60~320	-0.6	○
	2SA836	-55	-0.1	160~500	-0.5	○
	2SA844	-55	-0.1	160~500	-0.5	○
	2SA893	-90	-50 m	250~800	-0.5	○
	2SA1084	-90	-0.1	250~800	-0.2	○
	2SA1188	-90	-0.1	250~800	-0.1	○
	2SA1190	-90	-0.1	250~800	-0.1	○
	2SA872A	-120	-50 m	250~800	-0.5	○
	2SA893A	-120	-50 m	250~800	-0.5	○
	2SA1082	-120	-0.1	250~800	-0.2	○
	2SA1085	-120	-0.1	250~800	-0.2	○
	2SA1191	-120	-0.1	250~800	-0.1	○
	2SB1688	-300	-50 m	80~150	0.9	○
	2SD655	15	0.7	250 ~ 1200	0.5	○
	2SD467	20	0.7	85 ~ 240	0.5	○
	2SC458	30	0.1	100~500	0.2	○
	2SC458LG	30	0.1	100~500	0.2	○
	2SC1344	30	0.1	250~1200	0.5	○
	2SC1213	35	0.5	60~320	0.6	○
	2SC1345	50	0.1	250~1200	0.5	○
	2SC2308	50	0.1	100~320	0.2	○
	2SC2309	50	0.1	250~1200	0.2	○
	2SC2310	50	0.1	100~320	0.2	○
	2SC1213A	50	0.5	60~320	0.6	○
	2SC1214	50	0.5	60~320	0.6	○
	2SC2396	60	0.1	250~1200	0.2	○
	2SC2545	60	0.1	250~1200	0.2	○
	2SC2543	90	0.1	250~1200	0.2	○
	2SC2546	90	0.1	250~1200	0.2	○
	2SC2853	90	0.1	250~800	0.1	○
	2SC2855	90	0.1	250 ~ 800	0.1	○
	2SC1775	90	50 m	400~1200	0.5	○
	2SC1890	90	50 m	250~1200	0.5	○
	2SC2544	120	0.1	250~800	0.2	○
	2SC2547	120	0.1	250~800	0.2	○
	2SC2854	120	0.1	250 ~ 800	0.1	○
	2SC2856	120	0.1	250 ~ 800	0.1	○
	2SC1775A	120	50 m	400~1200	0.5	○

Package	Type No.	Ratings		Characteristics		Status
		V _{CEO} (V)	I _C (A)	hFE	V _{CE(sat)} (V) max	
TO-92(1)	2SC1890A	120	50 m	250~1200	0.5	○
	2SD2651	300	50 m	80 ~ 150	0.5	○
TO-92 MOD	2SB738	-16	-2.0	100 ~ 320	-0.3	○
	2SB562	-20	-1.0	85 ~ 240	-0.5	○
	2SB739	-20	-2.0	100 ~ 320	-0.3	○
	2SB740	-50	-1.0	100 ~ 320	-0.6	○
	2SB647	-80	-1.0	60 ~ 320	-1.0	○
	2SB715	-100	-50 m	250 ~ 800	-0.2	○
	2SB647A	-100	-1.0	60 ~ 200	-1.0	○
	2SB716	-120	-50 m	250~800	-0.2	○
	2SB716A	-140	-50 m	250 ~ 500	-0.2	○
	2SD787	16	2.0	100 ~ 800	0.3	○
	2SC4367	20	0.1	40 ~	1.0	○
	2SD468	20	1.0	85 ~ 240	0.5	○
	2SD788	20	2.0	100 ~ 800	0.3	○
	2SD1922	25	0.8	250 ~ 1200	0.3	○
	2SD789	50	1.0	100 ~ 800	0.3	○
	2SD667	80	1.0	60 ~ 320	1.0	○
	2SD667A	100	1.0	60 ~ 200	1.0	○
	2SC1921	200	50 m	30 ~ 300	1.0	○
	2SC2610	300	0.1	30 ~ 200	1.5	○
MPAK	2SB831	-20	-0.7	85 ~ 240	-0.5	○
	2SA1052	-30	-0.1	100 ~ 500	-0.2	○
	2SA1121	-35	-0.5	60 ~ 320	-0.6	○
	2SA1617	-50	-0.1	100 ~ 320	-0.2	○
	2SB1691	-50	-1	200~500	-0.3	○
	2SA1122	-55	-0.1	160 ~ 800	-0.5	○
	2SA1171	-90	-50 m	250 ~ 800	-0.5	○
	2SA1484	-90	-0.1	250 ~ 800	-0.1	○
	2SA1566	-120	-0.1	250 ~ 800	-0.1	○
	2SD1306	15	0.7	250 ~ 800	0.5	○
	2SD1101	20	0.7	85 ~ 240	0.5	○
	2SC2618	35	0.5	60 ~ 320	0.6	○
	2SC2462	40	0.1	100 ~ 500	0.2	○
	2SC2463	50	0.1	250 ~ 1200	0.5	○
	2SC4366	50	0.3	800 ~ 2000	0.3	○
CMPAK	2SD2655	50	1	200 ~ 500	0.3	○
	2SC4050	120	0.1	250 ~ 800	0.1	○
	2SC4702	300	50 m	60 ~ 150	0.5	○
	2SA2080	-30	-100m	100 ~ 500	-0.2	○
	2SA2081	-55	-100m	160 ~ 800	-0.5	○
	2SC5850	40	100m	100 ~ 500	0.2	○

■BRT Series (Small Signal Switching)

Package	Type No.	Ratings		Characteristics				Status
		V _{CC} (V)	I _O (mA)	V _{I(on)} (V) max	G _i min	R ₁ (kΩ) typ	R _{1/R2} typ	
TO-92(1)	BRA114ETP	-50	-100	-2.4	30	10	1.0	○
	BRA123ETP	-50	-100	-1.8	20	2.2	1.0	○
	BRA124ETP	-50	-100	-3.0	56	22	1.0	○
	BRA143ETP	-50	-100	-2.0	20	4.7	1.0	○
	BRA144ETP	-50	-100	-4.5	70	47	1.0	○
	BRC114ETP	50	100	2.4	30	10	1.0	○
	BRC123ETP	50	100	1.8	20	2.2	1.0	○
	BRC124ETP	50	100	3.0	56	22	1.0	○
	BRC143ETP	50	100	2.0	20	4.7	1.0	○
	BRC144ETP	50	100	4.5	70	47	1.0	○
MPAK	BRA114EMP	-50	-100	-2.4	30	10	1.0	○
	BRA123EMP	-50	-100	-1.8	20	2.2	1.0	○
	BRA124EMP	-50	-100	-3.0	56	22	1.0	○
	BRA143EMP	-50	-100	-2.0	20	4.7	1.0	○
	BRA144EMP	-50	-100	-4.5	70	47	1.0	○

Package	Type No.	Ratings		Characteristics				Status
		V _{CC} (V)	I _O (mA)	V _{I(on)} (V) max	G _i min	R ₁ (kΩ) typ	R _{1/R2} typ	
MPAK	BRC114EMP	50	100	2.4	30	10	1.0	○
	BRC123EMP	50	100	1.8	20	2.2	1.0	○
	BRC124EMP	50	100	3.0	56	22	1.0	○
	BRC143EMP	50	100	2.0	20	4.7	1.0	○
	BRC144EMP	50	100	4.5	70	47	1.0	○
CMPAK	BRA114ECM	-50	-100	-2.4	30	10	1.0	○
	BRA123ECM	-50	-100	-1.8	20	2.2	1.0	○
	BRA124ECM	-50	-100	-3.0	56	22	1.0	○
	BRA143ECM	-50	-100	-2.0	20	4.7	1.0	○
	BRA144ECM	-50	-100	-4.5	70	47	1.0	○
	BRC114ECM	50	100	2.4	30	10	1.0	○
	BRC123ECM	50	100	1.8	20	2.2	1.0	○
	BRC124ECM	50	100	3.0	56	22	1.0	○
	BRC143ECM	50	100	2.0	20	4.7	1.0	○
	BRC144ECM	50	100	4.5	70	47	1.0	○

注) ○: 正在批量生产

SPL: 正在提供样品

: 可以批量生产(交货期为 3 个月)

: 限定品种

: 大量订货对象品种(订货单位: 请参照第 19 页所载的发货数量)

Small Signal Transistors

■General Amplification

Package	Type No.	Ratings		Characteristics		Status
		V _{CEO} (V)	I _C (A)	h _{FE}	V _{CE(sat)} (V) max	
UPAK	2SB1001	-16	-2.0	100 ~ 320	-0.3	○
	2SB1002	-50	-1.0	100 ~ 320	-0.6	○
	2SB1025	-80	-1.0	60 ~ 320	-1.0	○
	2SB1026	-100	-1.0	60 ~ 200	-1.0	○
	2SB1028	-160	-1.5	60 ~ 200	-1.0	○
	2SD1367	16	2.0	100 ~ 500	0.3	○

Package	Type No.	Ratings		Characteristics		Status
		V _{CEO} (V)	I _C (A)	h _{FE}	V _{CE(sat)} (V) max	
UPAK	2SD1974	25	0.8	250 ~ 1200	0.4	○
	2SD1368	50	1.0	100 ~ 500	0.3	○
	2SD1418	80	1.0	60 ~ 320	1.0	○
	2SD1419	100	1.0	60 ~ 200	1.0	○
	2SD1421	160	1.5	60 ~ 200	1.0	○
	2SC3380	300	0.1	30 ~ 200	1.5	○

■General Switching

Package	Type No.	Ratings		Characteristics		Status
		V _{CEO} (V)	I _C (A)	h _{FE}	V _{CE(sat)} (V) max	
TO-92(1)	2SA673A(K)	-50	-0.5	60 ~ 320	-0.6	○
	2SA778(K)	-150	-50 m	30 ~	-1.0	○
	2SA778A(K)	-180	-50 m	40 ~ 200	-1.0	○
	2SC458(K)	30	0.1	100 ~ 500	0.4	○
	2SC1345(K)	50	0.1	250 ~ 1200	0.5	○

Package	Type No.	Ratings		Characteristics		Status
		V _{CEO} (V)	I _C (A)	h _{FE}	V _{CE(sat)} (V) max	
TO-92(1)	2SC1213A(K)	50	0.5	60 ~ 320	0.6	○
	2SC1515(K)	150	50 m	30 ~ 300	1.0	○
TO-92 MOD	2SD974	60	1.0	100 ~	0.3	○

■General Switching (Darlington Transistors)

Package	Type No.	Ratings		Characteristics		Status
		V _{CEO} (V)	I _C (A)	h _{FE}	toff (μs) typ	
TO-92(1)	2SC1472(K)	30	0.3	2 k ~ 100 k	0.8	○
TO-92 MOD	2SA1193(K)	-60	-0.5	2 k ~	0.9	○
	2SD2046	50	1.5	2 k ~ 10 k	—	○
	2SD1209(K)	60	1.0	4 k ~	—	○
	2SD2213	80	1.5	5 k ~ 30 k	4.0	○
	2SD1978	120	1.5	2 k ~ 30 k	2.0	○

Package	Type No.	Ratings		Characteristics		Status
		V _{CEO} (V)	I _C (A)	h _{FE}	toff (μs) typ	
UPAK	2SB1048	-60	-1.0	2 k ~	0.9	○
	2SD1470	60	1.0	2 k ~ 100 k	—	○
	2SD1472	120	1.5	2 k ~ 30 k	2.0	○

■High Frequency Amplification

Package	Type No.	Ratings		Characteristics				Status
		V _{CEO} (V)	I _C (A)	f _r (GHz) typ	NF (dB) typ	f (GHz) typ	Cob (pF) max	
TO-92(2)	2SC3512	11	50 m	6.0	1.6	0.9	1.6	○
	2SC3128	12	50 m	4.5	2.2	0.9	1.5	※◆
	2SC3510	12	50 m	4.5	2.2	0.9	1.5	○
	2SC1906	19	50 m	1.0	—	—	2.0	○
	2SC1907	19	50 m	1.1	—	—	2.0	○
	2SC535	20	20 m	0.94	3.5	0.1	1.2	○
	2SC2512	20	50 m	0.9	—	—	—	○
	2SC4308	20	0.3	2.5	—	—	4.0 typ	○
	2SC2471	30	50 m	2.0	—	—	1.5	○
	2SC460	30	0.1	0.23	—	—	3.5	○
	2SC461	30	0.1	0.23	—	—	3.5	○
	2SC4693	20	0.3	2.5	—	—	4.5 typ	○
MFPK (1408)	2SC5757	3.5	80 m	6.5	1.2	0.9	1.2	○
	2SC5758	3.5	80 m	8	1.2	0.9	0.95	○
	2SC5700	4	50 m	16.0	0.9	0.9	0.8	○
	2SC5812	4	50 m	15	1	0.9	0.4	○
	2SC5872	4	50 m	10.5	1.0	0.9	0.4	○
	2SC5628	6	50 m	5	1.1	0.9	1.3	○
	2SC5702	6	50 m	7.8	1.1	0.9	0.9	○
	2SC5849	6	80 m	4	1.1	0.9	1.15	○
	2SC5543	8	20 m	8.5	1.1	0.9	0.9	○
	2SC5544	8	50 m	6	1.0	0.9	1.4	○
	2SC5555	8	50 m	9	1.1	0.9	0.85	○
	2SC5554	9	20 m	7	1.4	0.9	0.9	○
CMPAK	2SC4784	8.0	20 m	10	1.2	0.9	0.8	○
	2SC5051	8.0	50 m	11	1.1	0.9	1.15	○
	2SC4965	8.0	100m	—	—	—	1.6	○
	2SC4899	9.0	20 m	9.0	1.2	0.9	0.85	○
	2SC4593	9.0	50 m	9.0	1.2	0.9	1.5	○
	2SC4901	9.0	50 m	9.0	1.2	0.9	1.4	○
	2SC4264	11	50 m	3.5	—	—	1.5	○
	2SC4537	11	50 m	6.0	1.6	0.9	1.5	○
	2SC4260	13	50 m	3.8	—	—	1.5	○
	2SC4261	15	50 m	2.4	—	—	1.0	○
	2SC4262	15	50 m	2.9	—	—	1.0	○
	2SC5852	20	20 m	0.94	—	—	0.9 typ	○
	2SC4265	20	50 m	1.2	—	—	1.5	○
	2SC5851	30	100m	0.23	5.5	0.1	1.6	○

Package	Type No.	Ratings		Characteristics				Status
		V _{CEO} (V)	I _C (A)	f _r (GHz) typ	NF (dB) typ	f (GHz) typ	Cob (pF) max	
CMPAK-4	2SC5623	3.5	12 m	27	1.8	1.8	0.4	○
	2SC5624	3.5	35 m	28	1.2	1.8	0.6	○
	2SC5593	4	12 m	23	1.9	1.8	0.4	○
	2SC5594	4	35 m	22	1.2	1.8	0.6	○
	2SC5894	4.6	12	20	2	1.8	0.29	○
	2SC5820	4.6	35	20	1.4	1.8	0.15	○
	HSG2001	5	100m	18	1.0	1.8	0.95	○
	2SC4995	8.0	50 m	11	1.1	0.9	1.05	○
	2SC5081	8.0	50 m	13.5	1.1	0.9	0.75	○
	2SC5998	5	500m	11	—	—	2.0	SPL
	2SC5773	6	80 m	10.8	1.1	0.9	1.25	○
	2SC5049	8.0	20 m	10	1.2	0.9	0.8	○
	2SC4680	8.0	50 m	—	—	—	1.5	○
	2SC5050	8.0	50 m	11	1.1	0.9	1.1	○
MPAK	2SC4964	8.0	100m	—	—	—	1.6	○
	2SC4591	9.0	50 m	9.0	1.2	0.9	1.5	○
	2SC5218	9.0	50 m	9.0	1.2	0.9	1.4	○
	2SC5772	9	100m	9	1.1	0.9	0.9	○
	2SC2734	11	50 m	3.5	—	—	1.5	○
	2SC3513	11	50 m	6.0	1.6	0.9	1.5	○
	2SC3127	12	50 m	4.5	2.2	0.9	1.5	○
	2SC5890	12	75 m	7.8	1.0	0.9	0.9	○
	2SC4197	13	50 m	3.8	—	—	1.3	○
	2SC3793	15	50 m	2.9	—	—	1.0	○
	2SC4196	15	50 m	2.4	—	—	1.0	○
	2SC2620	20	20 m	0.94	—	—	1.2	○
	2SC2776	20	30 m	0.32	5.5	0.1	1.5	○
	2SC2735	20	50 m	1.2	—	—	1.5	○
MPAK-4	2SC2736	20	50 m	2.2	—	—	1.0	○
	2SC2732	25	20 m	1.0	—	—	0.8	○
	2SC2619	30	0.1	0.23	—	—	3.5	○
	2SC5545	6.0	50 m	13	1.1	0.9	1.1	○
UPAK	2SC4926	8.0	50 m	11	1.1	0.9	1.1	○
	2SC5080	8.0	50 m	13.5	1.1	0.9	0.75	○
	2SC5631	6.0	80 m	11	1.8	0.9	2.0	○
	2SC4988	9.0	100m	8.5	1.3	0.9	1.6	○
	2SC4807	15	200m	4.4	2.5	0.9	2.8	○

■Twin Transistors

Package	Type No.	Ref. Chip Q1							Ref. Chip Q2							Status
		Ratings		Characteristics					Ratings		Characteristics					
		V _{CEO} (V)	I _C (A)	f _r (GHz) typ	NF (dB) typ	f (GHz)	C _{re} (pF)	V _{CEO} (V)	I _C (A)	f _r (GHz) typ	NF (dB) typ	f (GHz)	C _{re} (pF)			
SMFPAK-6	HTT1115S	2SC5700	4	50 m	13	1.0	0.9	0.3	2SC5757	3.5	80 m	6	1.5	0.9	0.8	
	HTT1213S	2SC5700	4	50 m	12	1.0	0.9	0.3	2SC5700	4.0	50 m	12	1.0	0.9	0.3	
EMFPAK-6	HTT1115E	2SC5700	4	50 m	13	1.0	0.9	0.3	2SC5757	3.5	80 m	6	1.5	0.9	0.8	○
	HTT1127E	2SC5700	4	50 m	12	1.0	0.9	0.3	2SC5849	6	80 m	4	1.1	0.9	0.5	○
	HTT1213E	2SC5700	4	50 m	12	1.0	0.9	0.3	2SC5700	4.0	50 m	12	1.0	0.9	0.9	○
	HTT1129E	2SC5849	6	80 m	4	1.1	0.9	0.5	2SC5872	6	50 m	10	1.0	0.9	0.25	○
	HTT1132E	2SC5872	6	50 m	10	1.0	0.9	0.25	2SC5849	6	80 m	4	1.1	0.9	0.5	○

Small Signal FET

■High Frequency Amplification

Package	Type No.	Ratings		Characteristics				Status
		V _{DS} (V)	I _D (A)	C _{iss} (pF) typ	PG(dB) typ	NF (dB) typ	f (GHz)	
TO-92(2)	2SK359	20	30 m	2.5	30	2.0	0.1	
	2SK168	30	20 m	5.0	27	1.7	0.1	
CMPAK	2SK1215	20	30 m	2.5	30	2.0	0.1	○
CMPAK-4	3SK318	6	20 m	1.7	21.5	1.6	0.9	○
	BB501C	6	20 m	1.7	21.5	1.8	0.9	○
	BB502C	6	20 m	1.7	22	1.6	0.9	○
	BB503C	6	20 m	1.7	22	1.8	0.9	○
	BIC702C	6	20 m	2.0	23	1.6	0.9	○
	BB101C	6	25 m	1.7	20	2.1	0.9	○
	BB301C	6	25 m	3.1	26	1.3	0.2	○
	BB504C	6	30 m	2.1	22	1.75	0.9	○
	BIC703C	6	30 m	2.0	22	1.8	0.9	○
	3SK296	12	25 m	1.5	19.5	2.0	0.9	○
	3SK298	12	25 m	2.9	25	1.0	0.2	○
	BB304C	12	25 m	3.1	29	1.2	0.2	○
	BB305C	12	25 m	3.1	28	1.5	0.2	○
	3SK317	14	25 m	3.0	27.6	1.0	0.2	○

Package	Type No.	Ratings		Characteristics				Status
		V _{DS} (V)	I _D (A)	C _{iss} (pF) typ	PG(dB) typ	NF (dB) typ	f (GHz)	
MPAK	2SK360	20	30 m	2.5	30	2.0	0.1	○
	2SK217	30	20 m	6.8	27	1.7	0.1	
MPAK-4	3SK319	6	20 m	1.7	21.5	1.6	0.9	○
	BB501M	6	20 m	1.7	21.5	1.8	0.9	○
	BB502M	6	20 m	1.7	22	1.6	0.9	○
	BB503M	6	20 m	1.7	22	1.8	0.9	○
	BIC702M	6	20 m	2.0	23	1.6	0.9	○
	BB101M	6	25 m	1.7	20	2.1	0.9	○
	BB301M	6	25 m	3.1	26	1.3	0.2	○
	BB504M	6	30 m	2.1	22	1.75	0.9	○
	BIC703M	6	30 m	2.0	22	1.8	0.9	○
	3SK295	12	25 m	1.5	19.5	2.0	0.9	○
	3SK297	12	25 m	2.9	25	1.0	0.2	○
	BB102M	12	25 m	1.6	20	2.1	0.9	○
	BB302M	12	25 m	3.0	26	1.7	0.2	○
	BB304M	12	25 m	3.1	29	1.2	0.2	○
	BB305M	12	25 m	3.1	28	1.5	0.2	○
	3SK300	14	25 m	3.1	27.6	1.0	0.2	○

■High Frequency Amplification (Twin Type)

Package	Type No.	Ratings		Characteristics (FET-1)				Characteristics (EET-2)				Status
		V _{DS} (V)	I _D (A)	C _{iss} (pF) typ	lyfsl (mS) typ	NF (dB) typ	f (GHz)	C _{iss} (pF) typ	lyfsl (mS) typ	NF (dB) typ	f (GHz)	
CMPAK-6	TBB1002	6	30 m	1.8	26	1.7	0.9	2.6	25	1.2	0.2	○
	TBB1004	6	30 m	1.8	26	1.7	0.9	2.7	32	1.2	0.2	○
	TBB1005	6	30 m	1.8	26	1.7	0.9	2.6	25	1.2	0.2	○
	TBB1008	6	30 m	1.8	26	1.7	0.9	2.7	32	1.2	0.2	○
	TBB1010	6	30 m	2.1	29	1.1	0.2	2.1	29	1.1	0.2	○

■μ-FET Series (Small Signal Switching)

Package	Type No.	V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω)								C _{iss}	Status
				V _{GS} = 10V		V _{GS} = 4V		V _{GS} = 2.5V		V _{GS} = 1.5V			
MPAK	2SJ575	-30	-0.1	2.8	3.3	5.7	7.9	—	—	—	—	25	
	2SJ574	-30	-0.3	1.1	1.3	2.2	3.1	—	—	—	—	50	○
	2SK3288	30	0.1	2.7	3.5	4.7	7.0	—	—	—	—	3	○
	2SK3287	30	0.3	1.26	1.44	2.8	3.44	—	—	—	—	6	○
	2SK3290	30	0.5	0.46	0.525	0.9	1.25	—	—	—	—	5	○

Package	Type No.	V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω)								C _{iss}	Status
				V _{GS} = 10V		V _{GS} = 4V		V _{GS} = 2.5V		V _{GS} = 1.5V			
				typ	max	typ	max	typ	max	typ	max		
CMPAK	2SJ586	-20	-0.1	—	—	4.1	5.0	6.0	8.5	—	—	28	○
	2SJ576	-30	-0.1	2.8	3.3	5.7	7.9	—	—	—	—	25	○
	2SK3348	20	0.1	—	—	1.6	1.9	2.2	3.2	—	—	18	○
	2SK3378	30	0.1	2.7	3.5	4.7	7.0	—	—	—	—	1.6	○
	2SK3289	30	0.3	1.26	1.44	2.8	3.44	—	—	—	—	6	○

■General Amplification

Package	Type No.	Ratings		Characteristics		Status
		V _{DS} (V _{DSX}) (V)	V _{GS} (V _{GS0}) (V)	I _D (I _G) (A)	I _{YFSL} (mS) min	
TO-92(2)	2SK435	22	—	0.1	20	6 ~ 40
MPAK	2SK1070	—	(- 22)	50 m	20	6 ~ 40

High Frequency Power MOS FET

■High Frequency Power Amplification

Package	Type No.	Ratings		Characteristics				Status
		V _{DSS} (V)	I _D (A)	P _{out} (W) typ		f (MHz)	P _{in} (W)	
RFPK-F	2SK3174A	60	16	270	860	14	28	SPL

Package	Type No.	Ratings		Characteristics				Status
		V _{DSS} (V)	I _D (A)	P _{out} (dBm) min		f (MHz)	P _{in} (dBm)	
UPAK	2SK3391	17	0.3	32	836	14	13.7	○
RP8P	2SK3390	17	1	38	836	21	13.7	○

注) ○ : 正在批量生产

SPL : 正在提供样品

: 可以批量生产 (交货期为 3 个月)

: 限定品种

: 大量订货对象品种 (订货单位: 请参照第 19 页所载的发货数量)

Overseas Sales Only

注意：下列为国外销售产品。

联系地址：RSM Design Center
RENESAS Semiconductor (Malaysia) Sdn. Bhd.
联系电话：(60) (4)-6438121

■General Amplification (Small Signal Transistors)

Package	Type No.	Ratings		Characteristics		Status
		V _{CEO} (V)	I _C (A)	hFE	V _{CE(sat)} (V) max	
TO-92(1)	H9012	-20	-0.5	64 to 250	-1.5	CBT
	HIT9012	-20	-0.5	64 to 250	-1.5	
	H8550	-20	-0.7	60 to 240	-0.5	CBT
	HIT8550	-20	-0.7	60 to 240	-0.5	
	H9015	-30	-0.1	100 to 1000	-0.5	CBT
	HIT9015	-30	-0.1	100 to 1000	-0.5	
	2SC1417	15	0.03	20 to 400	1.0	
	HIT5417	20	0.03	39 to 198	—	
	H9013	20	0.5	64 to 250	1.5	CBT
	HIT9013	20	0.5	64 to 250	1.5	
	H8050	20	0.7	20 to 240	0.5	CBT
	HIT8050	20	0.7	20 to 240	0.5	
	H9014	30	0.1	100 to 1000	0.5	CBT
	HIT9014	30	0.1	100 to 1000	0.5	
	H945	50	0.2	135 to 600	0.25	
TO-92 MOD	HIT5610	-20	-1.0	60 to 240	-0.5	
	HIT5609	20	1.0	60 to 240	0.5	

Note) : Large order device (Unit: Refer packing unit (P.19))

CBT: Center Base Type

■High Frequency Amplification (Small Signal Transistors)

Package	Type No.	Ratings		Characteristics				Status
		V _{CEO} (V)	I _C (A)	f _r (GHz) typ	NF (dB) typ	f (GHz)	C _{ob} (pF) max	
TO-92(2)	HIT9016	20	20 m	—	—	—	—	

Power Transistors

■General Amplification

Package	Type No.	Ratings		Characteristics		Status
		V _{CEO} (V)	I _C (A)	h _{FE}	V _{CE(sat)} (V) max	
DPAK(L)-(1)/ (S)	2SB1407(L)/(S)	-35	-2.5	60 ~ 320	-1.0	
	2SB1409(L)/(S)	-160	-1.5	60 ~ 200	-1.0	
	2SD2121(L)/(S)	35	2.5	60 ~ 320	1.0	
	2SD2122(L)/(S)	120	1.5	60 ~ 200	1.0	
	2SD2123(L)/(S)	160	1.5	60 ~ 200	1.0	

Package	Type No.	Ratings		Characteristics		Status
		V _{CEO} (V)	I _C (A)	h _{FE}	V _{CE(sat)} (V) max	
TO-220 AB	2SB857	-50	-4.0	60 ~ 320	-1.0	
	2SB858	-60	-4.0	60 ~ 320	-1.0	
	2SB859	-80	-4.0	60 ~ 200	-2.0	
	2SB860	-100	-4.0	50 ~ 250	-1.0	
	2SB861	-150	-2.0	60 ~ 200	-3.0	
	2SD1133	50	4.0	60 ~ 320	1.0	
	2SD1134	60	4.0	60 ~ 320	1.0	
	2SD1135	80	4.0	60 ~ 200	2.0	

■General Switching

Package	Type No.	Ratings			Characteristics		Status
		V _{CEO} (V)	V _{CB0} (V _{CE} S) (V)	I _C (A)	V _{CE} (sat) (V) max	t _f (μs) max	
DPAK(L)-(1)/ (S)	2SD2115(L)/(S)	60	150	2.0	0.8	0.6	
	2SC4499(L)/(S)	400	500	0.5	1.0	1.0	
TO-220 AB	2SB566(K)	-50	-70	-4.0	-1.0	0.5 typ	
	2SB566A(K)	-60	-70	-4.0	-1.0	0.5 typ	
	2SD476(K)	50	70	4.0	1.0	0.5 typ	
	2SD476A(K)	60	70	4.0	1.0	0.5 typ	
	2SD1137	100	100	4.0	1.0	—	
	2SD1163	120	300	7.0	2.0	0.5	
	2SD1138	150	200	2.0	3.0	—	
	2SD1163A	150	350	7.0	1.0	0.5	
	2SC2612	400	500	3.0	1.0	1.0	
	2SC2613	400	500	5.0	1.0	1.0	
	2SC2816	400	500	5.0	1.0	0.5	

Package	Type No.	Ratings			Characteristics		Status
		V _{CEO} (V)	V _{CB0} (V _{CE} S) (V)	I _C (A)	V _{CE} (sat) (V) max	t _f (μs) max	
TO-220 AB	2SC2898	400	500	8.0	1.0	0.8	
	2SC2979	800	900	3.0	1.0	1.0	
	2SD1527	1000	1000	0.5	5.0	—	
	2SC5273	1300	1300	0.03	5.0	—	
	2SC4913	2000	2000	20 m	5.0	—	
TO-220 FM	2SB1392	-60	-70	-4.0	-1.0	—	
	2SB1530	-150	-200	-2.0	-3.0	—	
	2SD2107	60	70	4.0	1.0	—	
	2SD2337	150	200	2.0	3.0	—	
	2SC5022	1500	1500	20 m	5.0	—	
TO-3P	2SC3336	400	500	15	1.0	0.5	
	2SC3365	400	500	10	1.0	1.0	

■General Switching (Darlington Transistors)

Package	Type No.	Ratings		Characteristics		Status
		V _{CEO} (V)	I _C (A)	h _{FE}	t _{off} (μs) typ	
DPAK(L)-(1)/ (S)	2SC4500(L)/(S)	60	1.0	2 k ~	0.6	
	2SD2124(L)/(S)	120	1.5	2 k ~ 30 k	2.0	
TO-220 AB	2SB1091	-60	-8.0	1 k ~ 20 k	3.0	
	2SB1103	-60	-8.0	1 k ~ 20 k	4.0	
	2SB727(K)	-120	-6.0	1 k ~ 20 k	3.0	
	2SB791(K)	-120	-8.0	1 k ~ 20 k	3.1	
	2SB955(K)	-120	-10	1 k ~ 20 k	4.0	
	2SC1881(K)	60	3.0	1 k ~	5.0	
	2SD768(K)	120	6.0	1 k ~ 20 k	3.0	
	2SD1606	120	6.0	1 k ~ 20 k	9.0	
	2SD970(K)	120	8.0	1 k ~ 20 k	6.5	
	2SD1126(K)	120	10	1 k ~ 20 k	8.0	
	2SD1113(K)	300	6.0	500 ~	23	
	2SD1976	300	6.0	500 ~	16.0	

Package	Type No.	Ratings		Characteristics		Status
		V _{CEO} (V)	I _C (A)	h _{FE}	t _{off} (μs) typ	
TO-220 FM	2SB1389	-60	-4.0	1 k ~ 20 k	5.0	
	2SB1390	-60	-8.0	1 k ~ 20 k	4.0	
	2SB1400	-120	-6.0	1 k ~ 20 k	3.0	
	2SB1391	-120	-8.0	1 k ~ 20 k	3.1	
	2SB1399	-120	-10	1 k ~ 20 k	4.0	
	2SD2106	120	6.0	1 k ~ 20 k	3.0	
	2SD2104	120	8.0	1 k ~ 20 k	6.5	
	2SD2101	200	10	1500 ~	11.5	
TO-3P	2SB1079	-100	-20	1 k ~ 20 k	3.5	
	2SB1032(K)	-120	-10	1 k ~ 20 k	4.0	
	2SB1494	-120	-25	2 k ~ 20 k	10	
	2SD1559	100	20	1 k ~ 20 k	12.0	
	2SD1436(K)	120	10	1 k ~ 20 k	4.0	

注) ○ : 正在批量生产

SPL: 正在提供样品

: 可以批量生产(交货期为 3 个月)

: 限定品种

: 大量订货对象品种(订货单位: 请参照第 19 页所载的发货数量)

▲: 内藏高速二极管品。

Power MOS FET

■General Switching

Package	Type No.	Ratings		Characteristics		Status
		V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) max	Ciss (pF) typ	
				4 V (4.5 V) 10 V (2.5 V)		
TO-92(1)	2SK1336	60	0.3	2.5	1.7	33
	2SK1337	100	0.3	6.5	4.5	35
TO-92 MOD	2SJ386	-30	-3.0	0.8	0.4	177 ○
	2SJ483	-30	-5.0	0.17	0.11	630
	2SJ496	-60	-5	0.24	0.16	600 ○
	H7P1001MD	-100	-1.1	1.1	0.8	400 ○
	H7P1006MD	-100	-1.8	(0.22)	0.18	2350 ○
	2SK2734	30	5	0.08	0.055	550
	2SK975	60	1.5	0.55	0.4	140 ○
	2SK2851	60	5	0.1	0.07	500 ○
	2SK2085	100	1	1.35	0.9	130
	H7N1009MD	100	2	(0.18)	0.13	820 ○
	2SK3446	150	1	1.95	(2.5)	95
	2SK3447	150	1	2.5	1.95	85
	2SJ451	-20	-0.2	3.5	(9)	2.4 ○
	2SJ399	-30	-0.2	5.0	3.0	1.1 ○
	2SJ486	-30	-0.3	0.65	(1.2)	45 ○
	2SJ452	-50	-0.2	7.0	(12)	1.1
	2SK2570	20	0.2	1.1	(2.2)	45 ○
MPAK	2SK2373	30	0.2	2.5	1.4	17.8 ○
	2SK2802	30	0.5	0.28	(0.5)	14
	2SK2980	30	1.0	0.28	(0.5)	155 ○
	2SK3000	40	1	0.5	0.3	14 ○
	2SK2569	50	0.2	2.6	(5)	14 ○
UPAK	2SJ244	-12	-2.0	0.5*	(0.9)	130 ○
	2SJ317	-12	-2.0	0.35	0.7 (-2.2V)	63 ○
	2SJ517	-20	-2.0	0.24	(0.43)	320 ○
	2SJ484	-30	-2.0	0.45	0.23	230 ○
	2SJ278	-60	-1.0	1.2	0.83	160 ○
	2SJ518	-60	-2.0	0.63	0.46	220
	2SJ186	-200	-0.5	—	12	75 ○
	2SK1579	12	2.0	0.35	0.7 (2.2V)	110 ○
	2SK2978	20	2.5	0.12	(0.2)	260
	2SK1772	30	1.0	0.85	0.6	85 ○
	2SK2247	30	2.0	0.45	0.35	177
	2SK1697	60	0.5	2.5	1.7	33 ○
	2SK1764	60	2.0	0.6	0.45	140 ○
	2SK2315	60	2.0	0.45	0.6 (3V)	173 ○
	2SK2788	60	2.0	0.25	0.16	180 ○
	2SK1698	100	0.3	6.5	4.5	35
	2SK1334	200	1.0	—	3.8	80 ○
DPAK(L)-(1)/ (S)	2SJ387(L)/(S)	-20	-10	0.07	(0.10)	1170 ○
	2SJ527(L)/(S)	-60	-5	0.8	0.4	220 ○
	2SJ529(L)/(S)	-60	-10	0.24	0.16	580 ○
	2SJ530(L)/(S)	-60	-15	0.16	0.1	850 ○
	2SJ319(L)/(S)	-200	-3.0	—	2.3	330 ○
	2SJ130(L)/(S)	-300	-1.0	—	8.5	235 ○
	2SJ181(L)/(S)	-600	-0.5	—	25	220 ○
	2SK3274(L)/(S)	30	3.0	0.03	0.013	1500 ○
	2SK2796(L)/(S)	60	5	0.25	0.16	180 ○
	2SK1299(L)/(S)	100	3.0	0.45	0.35	400
	2SK1254(L)/(S)	120	3.0	0.55	0.4	420 ○
	2SK1335(L)/(S)	200	3.0	—	0.8	380
	2SK1838(L)/(S)	250	1.0	—	8	60 ○
	2SK1151(L)/(S)	450	1.5	—	5.5	160 ○
	2SK1152(L)/(S)	500	1.5	—	6	160 ○
DPAK(L)-(2)/ (S)	2SK1880(L)/(S)	600	1.5	—	8	250 ○
	2SK2059(L)/(S)	600	3.0	—	5	295 ○
	2SJ506(L)/(S)	-30	-10	0.18	0.085	630 ○
	2SJ528(L)/(S)	-60	-7	0.37	0.22	400 ○
	2SK2084(L)/(S)	20	7.0	0.075	0.053	800 ○
	2SK2329(L)/(S)	30	10	0.04	(0.06)	1250 ○
	2SK2735(L)/(S)	30	20	0.05	0.028	750 ○
	2SK2925(L)/(S)	60	10	0.16	0.08	350 ○
	2SK2926(L)/(S)	60	15	0.11	0.055	500 ○
	2SK2869(L)/(S)	60	20	0.07	0.045	740 ○
	2SK3147(L)/(S)	100	5	0.18	0.13	420 ○
	H7P0601DL/DS	-60	-20	(0.085)	0.05	2200
	H7P1002DL/DS	-100	-15	0.15	0.105	2600
	H7N0603DL/DS	60	30	(0.022)	0.015	3200 SPL
	H7N1005DL/DS	100	12	(0.155)	0.11	830
TO-220 AB	H7N1004DL/DS	100	25	(0.045)	0.035	2800
	H5N2005DL/DS	200	6	—	0.65	300 ○
	H5N2004DL/DS	200	8	—	0.48	450 ○
	H5N2505DL/DS	250	5	—	0.89	300 ○
	H5N2510DL/DS	250	5	0.97	0.89	365 ○
	H5N2504DL/DS	250	7	0.67	0.63	570 ○
	H5N2508DL/DS	250	7	—	0.63	450 ○
	H5N5006DL/DS	500	3	—	3.0	365 ○
	2SJ539	-60	-10	0.36	0.21	400 ○
	2SJ540	-60	-12	0.23	0.15	580 ○
	2SJ541	-60	-15	0.155	0.095	850 ○
	2SJ542	-60	-18	0.11	0.065	1300 ○
	2SJ543	-60	-20	0.095	0.055	1750 ○
	2SJ544	-60	-30	0.055	0.037	2500 ○
	2SJ247	-100	-8.0	0.45	0.3	880 ○
	2SJ221	-100	-20	0.22	0.16	1800 ○
	H7N0203AB	20	90	0.0051	0.003	6800 ○
	2SK3081	30	45	0.025	0.014	1570 ○
	2SK2959	30	50	0.018	0.01	2000 ○
	H7N0307AB	30	60	0.0115	0.0058	2500 ○

Package	Type No.	Ratings		Characteristics			Status	
		V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) max		Ciss (pF) typ		
				4 V (4.5 V)	10 V (2.5 V)			
TO-220 AB	H7N0308AB	30	70	0.0085	0.0048	3350		
	2SK3141	30	75	0.0085	0.005	6800	○	
	H7N0312AB	30	85	0.0058	0.0033	6900		
	2SK3136	40	75	0.010	0.0058	6800	○	
	2SK2927	60	10	0.15	0.075	350	○	
	2SK2928	60	15	0.105	0.052	500	○	
	2SK2929	60	25	0.07	0.034	740	○	
	2SK2930	60	35	0.05	0.026	1100		
	2SK2800	60	40	0.04	0.02	1500	○	
	2SK2931	60	45	0.025	0.013	2200	○	
	H7N0608AB	60	70	(0.012)	0.008	6200	○	
	2SK3069	60	75	0.012	0.0075	7100	○	
	H7N0602AB	60	85	(0.009)	0.0052	9000	○	
	2SK3418	60	85	0.009	0.0055	9770	○	
	H8N0801AB	80	60	(0.0138)	0.0105	4750		
	2SK3228	80	75	0.012	0.0075	9700	○	
	2SK1300	100	10	0.35	0.25	525	○	
	2SK1301	100	15	0.18	0.13	860	○	
	2SK1302	100	20	0.12	0.085	1300	○	
	2SK3149	100	20	0.085	0.060	840	○	
	H7N1004AB	100	30	0.045	0.035	2800	○	
	2SK740	150	10	—	0.15	1200	○	
	2SK3154	150	15	0.15	0.13	850	○	
	2SK3156	150	20	0.08	0.07	1750	○	
	2SK3158	150	30	0.063	0.045	2600	○	
	2SK2590	200	7	—	0.45	700	○	
	2SK3214	200	10	0.19	0.17	1100		
	2SK1667	250	7.0	—	0.55	690	○	
	2SK1761	250	12	—	0.35	1100	○	
	2SK1400A	350	7.0	—	0.8	635	○	
	2SK1153	450	3.0	—	2.8	330	○	
	2SK1155	450	5.0	—	1.4	640	○	
	2SK1157	450	7.0	—	0.8	1050	○	
	2SK1159	450	8.0	—	0.7	1150	○	
	2SK1154	500	3.0	—	3	330	○	
	2SK1156	500	5.0	—	1.5	640	○	
	2SK1158	500	7.0	—	0.9	1050	○	
	2SK2408▲	500	7	—	0.9	1100	○	
	2SK1160	500	8.0	—	0.8	1150	○	
	2SK1402	600	4.0	—	2.4	600	○	
	2SK1809	600	5.0	—	1.5	1000	○	
	2SK1402A	650	4.0	—	2.6	600	○	
	2SK2328	650	7.0	—	1.4	1180	○	
	2SK1338	900	2.0	—	7	425	○	
	2SK1807	900	4.0	—	4	740	○	
	TO-220 C·FM	2SJ471	-30	-30	0.06	0.035	1700	○
		2SJ545	-60	-12	0.23	0.15	580	○
		2SJ546	-60	-15	0.155	0.095	850	○
		2SJ531	-60	-18	0.11	0.065	1300	○
		2SJ532	-60	-20	0.095	0.055	1750	○
2SJ533		-60	-30	0.055	0.037	2500	○	
2SK2736		30	30	0.05	0.028	750	○	
2SK2737		30	45	0.025	0.014	1570	○	
2SK2956		30	50	0.018	0.01	2000	○	
2SK3142		30	60	0.0085	0.005	6800	○	
H7N0308CF		30	60	0.0085	0.0048	3350	○	
2SK2932		60	10	0.15	0.075	350	○	
2SK2933		60	15	0.105	0.052	500	○	
2SK2934		60	25	0.07	0.034	740	○	
2SK2935		60	35	0.05	0.026	1100	○	
2SK2738		60	40	0.04	0.02	1500	○	
2SK2936		60	45	0.025	0.013	2200	○	
2SK2529		60	50	0.016	0.01	3550	○	
2SK3140		60	60	0.012	0.0075	7100	○	
2SK3229		80	60	0.012	0.0075	9800	○	
2SK2425		250	7	—	0.55	690	○	
2SK2426		250	12	—	0.35	1100	○	
H5N2502CF		250	18	—	0.105	2300	SPL	
2SK2114		450	5.0	—	1.4	640	○	
2SK2116		450	7.0	—	0.8	1050	○	
2SK2725		500	5	—	1.6	630	○	
2SK3233		500	5	—	1.5	580	○	
2SK2117		500	7.0	—	0.9	1050	○	
2SK2726	500	7	—	0.95	1100	○		
2SK3234	500	8	—	0.85	970	○		
2SK2144	600	3.0	—	5	295			
2SK2118	600	5.0	—	1.5	1000			
TO-220 FM	2SJ547	-60	-10	0.36	0.21	400	○	
	2SJ526	-60	-12	0.23	0.15	580	○	
	2SJ548	-60	-15	0.155	0.095	850	○	
	2SJ534	-60	-18	0.11	0.065	1300	○	
	2SJ504	-60	-20	0.095	0.055	1750	○	
	2SJ535	-60	-30	0.055	0.037	2500	○	
	2SJ248	-100	-8.0	0.45	0.3	880	○	
	2SJ222	-100	-20	0.22	0.16	1800	○	
	2SJ350	-120	-6.0	0.9	0.7	900	○	
	2SJ410	-200	-6	—	0.85	900		
	2SK2937	60	25	0.07	0.034	740	○	
	H7N0608FM	60	40	(0.012)	0.008	6200		
	2SK3212	100	10	0.17	0.13	420		
	2SK1305	100	10	0.35	0.25	525	○	
H7N1005FM	100	12	(0.155)	0.11	830	○		

Power MOS FET

General Switching

Package	Type No.	Ratings		Characteristics			Status
		V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) max		C _{iss} (pF) typ	
				4 V (4.5 V)	10 V (2.5 V)		
TO-220 FM	2SK1306	100	15	0.18	0.13	860	○
	2SK1307	100	20	0.12	0.085	1300	○
	2SK1348	100	20	0.085	0.060	900	○
	H7N1004FM	100	25	(0.045)	0.035	2800	○
	2SK2202	120	7.0	0.55	0.4	420	○
	2SK3152	120	10	0.17	0.13	580	○
	2SK3153	120	15	0.11	0.085	860	○
	2SK1318	120	20	0.16	0.12	1300	○
	2SK3155	150	15	0.15	0.13	850	○
	2SK3157	150	20	0.08	0.07	1750	○
	2SK3209	150	25	0.063	0.045	2600	○
	2SK1957	200	7.0	—	0.45	700	○
	2SK2212	200	10	—	0.3	1000	○
	2SK3160	200	10	0.19	0.17	1100	○
	2SK3177	200	15	0.125	0.115	1600	○
	2SK3162	200	20	0.085	0.075	2420	○
	2SK1668	250	7.0	—	0.55	690	○
	2SK1762	250	12	—	0.35	1100	○
	2SK1862	450	3.0	—	2.8	330	○
	2SK1626	450	5.0	—	1.4	640	○
	2SK1566	450	7.0	—	0.8	1050	○
	2SK1863	500	3.0	—	3	330	○
	H5N5006FM	500	3	—	3.0	365	○
	2SK1627	500	5.0	—	1.5	640	○
	H5N5001FM	500	5	—	1.5	580	○
	2SK1567	500	7.0	—	0.9	1050	○
	2SK1572	600	3.0	—	5	295	○
	2SK1637	600	4.0	—	2.4	600	○
	2SK1404	600	5.0	—	1.5	1000	○
	2SK2422	650	4.0	—	2.6	600	○
	2SK1808	900	4.0	—	4	740	○
LDBPAK(L) (S)	2SJ479(L)(S)	-30	-30	0.06	0.035	1700	○
	2SJ549(L)(S)	-60	-12	0.23	0.15	580	○
	2SJ550(L)(S)	-60	-15	0.155	0.095	850	○
	2SJ551(L)(S)	-60	-18	0.11	0.065	1300	○
	2SJ552(L)(S)	-60	-20	0.095	0.055	1750	○
	2SJ553(L)(S)	-60	-30	0.055	0.037	2500	○
	2SJ505(L)(S)	-60	-50	0.036	0.022	4100	○
	2SK2684(L)(S)	30	30	0.05	0.028	750	○
	2SK2957(L)(S)	30	50	0.018	0.01	2000	○
	2SK2958(L)(S)	30	75	0.014	0.007	4100	○
	2SK3134(L)(S)	30	75	0.010	0.005	6800	○
	2SK3070(L)(S)	40	75	0.010	0.0058	6800	○
	2SK3082(L)(S)	60	10	0.15	0.075	350	○
	2SK2938(L)(S)	60	25	0.07	0.034	740	○
	2SK2939(L)(S)	60	35	0.05	0.026	1100	○
	2SK2912(L)(S)	60	40	0.04	0.02	1500	○
	2SK2940(L)(S)	60	45	0.025	0.013	2200	○
	2SK2553(L)(S)	60	50	0.016	0.01	3550	○
	2SK3135(L)(S)	60	75	0.012	0.0075	7100	○
	2SK3461(L)(S)	60	85	0.009	0.0055	9770	○
	2SK1623(L)(S)	100	20	0.12	0.085	1300	○
	2SK3150(L)(S)	100	20	0.085	0.060	900	○
	2SK1620(L)(S)	150	10	—	0.15	1200	○
	2SK3210(L)(S)	150	30	0.063	0.045	2600	○
	2SK3161(L)(S)	200	15	0.125	0.115	1600	○
	2SK3211(L)(S)	200	25	0.085	0.075	2420	○
	2SK1636(L)(S)	250	15	—	0.27	1250	○
	2SK1313(L)(S)	450	5.0	—	1.4	640	○
	2SK1540(L)(S)	450	7.0	—	0.8	1050	○
	2SK1315(L)(S)	450	8.0	—	0.7	1150	○
	2SK1314(L)(S)	500	5.0	—	1.5	640	○
2SK1316(L)(S)	500	8.0	—	0.8	1150	○	
2SK1647(L)(S)	900	2.0	—	7	425	○	
2SK1528(L)(S)	900	4.0	—	4	740	○	
LDBPAK(L) (S)-(1) (S)-(2)	H7N0310LD/L/S/LM	30	30	(0.019)	0.01	1400	
	H7N0311LD/L/S/LM	30	45	(0.016)	0.0088	1650	
	H7N0307LD/L/S/LM	30	60	0.0115	0.0058	2500	○
	H7N0308LD/L/S/LM	30	70	0.0085	0.0048	3350	
	H7N0312LD/L/S/LM	30	85	0.0058	0.0033	6900	
	H7N0401LD/L/S/LM	40	95	(0.007)	0.0042	9300	
	H7N0608LD/L/S/LM	60	70	(0.012)	0.008	6200	
	H7N0602LD/L/S/LM	60	85	(0.009)	0.0052	9000	○
	H7N1005LD/L/S/LM	100	15	(0.155)	0.11	830	○
	H7N1004LD/L/S/LM	100	30	(0.045)	0.035	2800	○
	H7N1002LD/L/S/LM	100	75	(0.015)	0.01	9700	○
	H5N2001LD/L/S/LM	200	20	—	0.125	1350	
	H5N2501LD/L/S/LM	250	18	—	0.18	1350	
H5N5006LD/L/S/LM	500	3.5	—	3.0	365		
TO-3P	2SJ217	-60	-45	0.06	0.042	3800	○
	2SJ554	-60	-45	0.055	0.037	2500	○

Package	Type No.	Ratings		Characteristics		Ciss (pF) typ	Status
		V _{DSS} (V)	ID (A)	R _{DS(on)} (Ω) max			
				4 V (4.5 V)	10 V (2.5 V)		
TO-3P	2SJ555	-60	-60	0.036	0.022	4100	○
	2SK2096	60	45	0.028	0.022	3530	○
	2SK2955	60	45	0.025	0.013	2200	○
	2SK2586	60	60	0.016	0.01	3550	○
	2SK2554	60	75	0.01	0.006	7700	○
	2SK3163	60	75	0.012	0.0075	7100	○
	2SK3419	60	90	0.009	0.0055	9770	○
	2SK1303	100	30	0.09	0.06	1750	○
	2SK1304	100	40	0.04	0.03	3500	○
	2SK3151	100	50	0.025	0.015	4000	○
	2SK3159	150	50	0.042	0.030	4000	○
	H5N2003P	200	60	—	0.042	5150	○
	H5N2305P	230	60	—	0.038	5200	
	2SK2007 ▲	250	20	—	0.15	2340	
	2SK2075	250	20	—	0.13	2400	
	H5N2501P	250	20	—	0.18	1350	
	2SK1669 ▲	250	30	—	0.095	3100	○
	2SK1671	250	30	—	0.095	3000	○
	H5N2509P	250	30	—	0.069	3600	○
	H5N2503P	250	50	—	0.055	5200	○
	H5N2507P ▲	250	50	—	0.055	5000	
	2SK1401	300	15	—	0.35	1250	○
	H5N3004P	300	25	—	0.093	3600	○
	H5N3003P	300	40	—	0.069	5150	○
	H5N3008P ▲	300	40	—	0.069	5150	
	2SK1401A	350	15	—	0.4	1250	○
	2SK1161	450	10	—	0.8	1050	○
	2SK1515 ▲	450	10	—	0.8	1100	○
	2SK1163	450	11	—	0.7	1150	○
	2SK1165	450	12	—	0.55	1450	○
	2SK1167	450	15	—	0.36	2050	○
	2SK1169	450	20	—	0.25	2800	○
	2SK1517 ▲	450	20	—	0.25	3050	○
	2SK1162	500	10	—	0.9	1050	○
	2SK1516 ▲	500	10	—	0.9	1100	○
	2SK2727	500	10	—	0.95	1100	○
	2SK1164	500	11	—	0.8	1150	○
	2SK1166	500	12	—	0.6	1450	○
	2SK2568	500	12	—	0.6	1560	○
	2SK1168	500	15	—	0.4	2050	○
	2SK3235	500	15	—	0.4	1920	○
	2SK2728	500	18	—	0.45	2150	○
	2SK1170	500	20	—	0.27	3050	○
	2SK1518 ▲	500	20	—	0.27	2800	○
	2SK2729	500	20	—	0.29	3300	○
	2SK2730	500	25	—	0.24	3500	○
	H5N5007P	500	25	—	0.225	3900	○
	H5N5012P ▲	500	25	—	0.225	3600	△
	H5N5015P	500	32	—	0.17	4600	○
	2SK1403	600	8.0	—	1.3	1180	
	2SK1968	600	12	—	0.88	1800	○
	2SK1573	600	15	—	0.5	3150	○
	H5N6001P	600	20	—	0.38	4640	○
	2SK1403A	650	8.0	—	1.4	1180	○
	2SK1339	900	3.0	—	7	425	○
	2SK1340	900	5.0	—	4	740	○
	2SK1341	900	6.0	—	3	980	○
	2SK1342	900	8.0	—	1.6	1730	○
	2SK1933	900	10	—	1.2	2620	○
	2SK1773	1000	5.0	—	2	1700	○
	2SK1934	1000	8.0	—	1.6	2690	○
	2SK1317	1500	2.5	—	12	990	○
	2SK1835	1500	4.0	—	7	1700	○
TO-3P FM	2SJ216	-60	-35	0.09	0.06	2400	○
	2SJ218	-60	-45	0.06	0.042	3800	○
	2SK1298	60	40	0.025	0.018	3600	○
	2SK1666	60	45	0.035	0.02	3950	
	2SK2203	60	50	0.013	0.01	8330	
	H5N2301PF	230	25	—	0.085	2250	○
	H5N2306PF	230	30	—	0.052	3500	○
	H5N2305PF	230	35	—	0.038	5200	○
	2SK2008 ▲	250	20	—	0.15	2340	○
	2SK1670 ▲	250	30	—	0.095	3100	○
	H5N2509PF	250	30	—	0.069	3600	△
	2SK1328	450	12	—	0.55	1450	○
	2SK1832	500	10	—	0.9	1050	○
	2SK1329	500	12	—	0.6	1450	○
	2SK1405 ▲	600	15	—	0.5	3150	○
	2SK1859	900	6.0	—	3	980	○
	2SK1775	900	8.0	—	1.6	1730	○
	2SK2225	1500	2.0	—	12	990	○

Power MOS FET

■General Switching

Package	Type No.	Ratings		Characteristics		Status
		V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) max	Ciss (pF) typ	
				4 V (4.5 V) 10 V (2.5 V) [1.5 V]		
TO-3PL	2SK1947▲	250	50	—	0.06	5810 ○
	2SK1948	250	50	—	0.06	5830 ○
	H5N2513PL▲	250	100	—	0.026	9300 △
	H5N2801P	280	70	—	0.043	5400 △
	2SK1519▲	450	30	—	0.15	5800 ○
	2SK1628	450	30	—	0.25	2800 ○
	2SK1526	450	40	—	0.15	5800 ○
	2SK1521▲	450	50	—	0.1	8700 ○
	2SK1836	450	50	—	0.1	8150 ○
	2SK1520▲	500	30	—	0.16	5800 ○
	2SK1629	500	30	—	0.27	2800 ○
	2SK1971	500	35	—	0.23	4320 ○
	2SK1527	500	40	—	0.16	5800 ○
	2SK1522▲	500	50	—	0.11	8700 ○
	2SK1837	500	50	—	0.11	8150 ○
	H5N5004PL▲	500	50	—	0.11	7630 ○
	H5N5011PL	500	50	—	0.115	7700 △
	2SK2393	1500	8	—	2.8	4370 ○
FP-8DA JEDEC SOP-8	HAT1025R [D]	-20	-4.5	0.095	(0.15)	860 ○
	HAT1021R	-20	-5.5	0.06	(0.085)	1200 ○
	HAT1054R [D]	-20	-6	(0.03)	(0.05)	1550 ○
	HAT1023R	-20	-7	0.04	(0.06)	2250 ○
	HAT1098R	-20	-7	(0.037)	0.022	1950 ○
	HAT1121R [D]	-20/-12	-4/-7	(0.133)/ (0.025)	0.075/ (0.038)	460/ 2200 ○
	HAT1024R [D]	-30	-3.5	0.34	0.16	350 ○
	HAT1016R [D]	-30	-4.5	0.18	0.09	660 ○
	HAT1020R	-30	-5	0.13	0.07	860 ○
	HAT1026R	-30	-7	0.065	0.037	1700 ○
	HAT1036R	-30	-12	0.034	0.014	4200 ○
	HAT1047R/RJ	-30	-14	(0.025)	0.012	3500 ○
	HAT1048R	-30	-16	(0.0135)	0.007	5700 ○
	HAT1038R/RJ [D]	-60	-3.5	0.23	0.15	600 ○
	HAT1055R/RJ [D]	-60	-5	(0.13)	0.076	1350 SPL
	HAT1097R/RJ	-60	-5	(0.13)	0.076	1350 SPL
	HAT2057RA [D]	20	4	0.033	[0.06]	1100 ○
	HAT2027R [D]	20	7	0.038	(0.053)	720 ○
	HAT2026R	20	11	0.015	(0.021)	1760 ○
	HAT2029R [D]	28	7.5	0.033	(0.043)	780 ○
	HAT2108R [D]	28	11	0.015	(0.022)	2200 ○
	HAT2103R [D]	30	4.5	(0.13)	0.065	220 ○
	HAT2024R [D]	30	5.5	0.11	0.065	310 ○
	HAT2016R [D]	30	6.5	0.08	0.045	560 ○
	HAT2209R	30	7	0.055	0.036	(365) SPL
	HAT2218R [D]	30/30	7.5/8.0	(0.040)/ (0.029)	0.024/ 0.022	630/ 1330 SPL
	HAT2219R [D]	30/30	7.5/8.0	(0.040)/ (0.029)	0.024/ 0.022	630/ 1330 SPL
	HAT2019R	30	8	0.027	(0.037)	920 ○
	HAT2020R	30	8	0.05	0.028	780 ○
	HAT2025R	30	8	(0.05)	0.026	660 ○
	HAT2043R [D]	30	8	0.029	0.022	1170 ○
	HAT2093R [D]	30	9	(0.039)	0.023	750 ○
	HAT2208R	30	9	0.035	0.024	(610) SPL
	HAT2071R	30	10	(0.036)	0.020	740 ○
	HAT2022R	30	11	0.025	0.015	1450 ○
	HAT2092R [D]	30	11	(0.025)	0.016	1400 ○
	HAT2199R	30	11	0.025	0.0165	1060 △
	HAT2036R	30	12	(0.03)	0.015	1200 ○
	HAT2070R	30	12	(0.022)	0.014	1400 ○
	HAT2068R	30	14	(0.016)	0.009	1650 ○
	HAT2198R	30	14	0.014	0.009	1650 △
	HAT2040R	30	15	0.013	0.008	4400 ○
	HAT2044R	30	15	(0.0095)	(0.013)	3420 ○
	HAT2064R	30	16	(0.01)	0.0063	2200 ○
	HAT2118R	30	16	(0.0125)	0.0069	2450 ○
	HAT2197R	30	16	0.0099	0.0067	2650 △
	HAT2195R	30	18	0.0084	0.0058	3400 △
	HAT2028R/RJ [D]	60	4	0.16	0.10	280 ○
	HAT2038R/RJ [D]	60	5	0.084	0.058	520 ○
	HAT2114R/RJ [D]	60	6	(0.05)	0.032	1000 ○
	HAT2033R/RJ	60	7	0.053	0.038	740 ○
	HAT2058R [D]	100	4	0.18	0.145	420 ○
	HAT2201R	100	6	(0.049)	0.043	(1445) SPL
	HAT2200R	100	8	(0.033)	0.028	(2390) SPL
	HAT2095R	150	2.5	—	0.42	300 SPL
	HAT2085R	200	2	—	0.64	300 ○
	HAT2088R	200	2	—	0.44	450 ○
	HAT2077R	200	3	—	0.235	830 ○
	HAT2080R	250	1.7	—	0.85	300 ○
	HAT2089R	250	2	—	0.6	450 ○
	HAT2087R	250	2.5	—	0.31	830 ○
	HAT3017R (Nch/Pch)	30/-30	3.8/-2.6	(0.185/ 0.45)	0.18/ 0.115	150/ 210 △
	HAT3004R (Nch/Pch)	30/-30	5.5/-3.5	0.11/ 0.34	0.065/ 0.16	310/ 350 ○

注) HAT 系列正在以 HATxxxxWS 型号提供样品。

Package	Type No.	Ratings		Characteristics		Status
		V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) max	Ciss (pF) typ	
				4 V (4.5 V) 10 V (2.5 V) [1.5 V]		
FP-8DA JEDEC SOP-8	HAT3006R (Nch/Pch)	30/-30	6.5/-4.5	0.08/ 0.18	0.045/ 0.09	560/ 660 ○
	HAT3008R/RJ (Nch/Pch)	60/-60	5/-3.5	0.084/ 0.23	0.058/ 0.15	520/ 600 ○
	HAT3010R (Nch/Pch)	60/-60	6/-5	0.045/ 0.13	0.032/ 0.076	1050/ 1350 ○
	HAT3018R/RJ (Nch/Pch)	60/-60	6/(0.05)/ (0.13)	0.035/ 0.76	0.035/ 0.76	1000/ 1350 ○
	HAT3019R (Nch/Pch)	100/-100	3.5/-2.3	0.16/ 0.50	0.115/ 0.30	815/ 930 △
TTP-8D (TSSOP-8)	HAT1031T [D]	-20	-2.5	0.16	(0.28)	390 ○
	HAT1033T	-20	-3.5	0.063	(0.09)	970 ○
	HAT1041T	-20	-6	0.029	(0.045)	1750 ○
	HAT1065T [D]	-200	-0.25	7.5	6.2	140 △
	HAT2031T [D]	20	3.5	0.07	(0.098)	300 △
	HAT2042T [D]	28	5	0.034	(0.044)	510 ○
	HAT2052T [D]	28	5	0.034	(0.044)	510 ○
	HAT2037T	28	5.5	0.028	(0.038)	780 ○
	HAT2045T [D]	28	6	0.026	(0.037)	680 ○
	HAT2051T [D]	30	1	0.2	(0.3)	155 ○
	HAT2050T [D]	100	1	1	0.75	90 ○
	HAT2085T	200	1.4	—	0.64	300 ○
TSOP-6	HAT2105T [D]	200	0.5	2.7	2.2	120 △
	HAT2080T	250	1.2	—	0.85	300 ○
	HAT3015T (Nch/Pch)	200/-200	0.5/-0.25	2.7/ 7.5	2.2/ 6.2	120/ 140 ○
	HAT1063M [D]	-12	-1	(0.15)	(0.265)	385 ○
	HAT1043M	-20	-4.4	(0.065)	(0.110)	750 ○
	HAT1053M	-20	-5.5	(0.041)	(0.064)	1240 ○
	HAT1044M	-30	-4.5	(0.105)	0.060	600 ○
	HAT2053M	20	6.1	(0.033)	(0.048)	570 ○
	HAT2054M	30	6.3	(0.052)	0.021	620 ○
	HAT1072H	-30	-40	(0.0077)	0.0045	9500 ○
	HAT2134H	20	60	0.0058	0.0029	4500 ○
	HAT2160H	20	60	(0.0041)	0.0026	7750 ○
LFPK	HAT2168H	30	30	(0.0135)	0.0079	1780 ○
	HAT2116H	30	30	(0.0153)	0.0082	1650 ○
	HAT2096H	30	40	(0.010)	0.0053	2200 ○
	HAT2143H	30	40	0.0015	0.0061	2450 ○
	HAT2167H	30	40	(0.0093)	0.0055	2800 ○
	HAT2166H	30	45	(0.0061)	0.0038	4200 ○
	HAT2099H	30	50	(0.0073)	0.0037	4750 ○
	HAT2165H	30	55	(0.0053)	0.0033	5180 ○
	HAT2164H	30	60	(0.0044)	0.0031	7600 ○
	HAT2139H	40	20	—	0.0115	2000 △
	HAT2129H	40	30	—	0.0075	3200 ○
	HAT2172H	40	30	—	0.0075	1445 ○
	HAT2171H	40	40	—	0.0048	2280 △
	HAT2137H	40	45	—	0.0048	6200 ○
	HAT2170H	40	45	—	0.0042	3600 ○
	HAT2169H	40	50	(0.006)	0.0035	6650 ○
	HAT2142H	100	10	—	0.044	2000 ○
	HAT2141H	100	15	—	0.0275	3200 ○
	HAT2175H	100	15	—	0.042	1445 ○
	HAT2174H	100	20	—	0.027	2280 ○
	HAT2140H	100	25	—	0.016	6350 ○
	HAT2173H	100	25	—	0.015	4350 ○
	HAT2132H	200	6	—	0.45	450 SPL
	HAT2119H	250	5	—	0.63	450 ○
CMFPAK-6	HAT1095C	-12	-2	(0.140)	(0.205)	300 △
	HAT1094C	-12	-2.5	(0.088)	(0.126)	500 △
	HAT1059C	-12	-3	(0.064)	(0.088)	1080 ○
	HAT1069C	-12	-3	(0.052)	(0.07)	1310 ○
	HAT1093C	-12	-3	(0.054)	(0.076)	900 ○
	HAT1096C	-20	-1	(0.293)	(0.530)	155 △
	HAT1091C	-20	-1.5	(0.175)	(0.287)	205 △
	HAT1089C	-20	-2	(0.103)	(0.168)	360 △
	HAT1090C	-20	-2.5	(0.065)	(0.104)	640 ○
	HAT1058C	-20	-3	(0.074)	(0.126)	740 ○
	HAT2206C	12	2	(0.085)	(0.114)	250 △
	HAT2205C	12	3	(0.058)	(0.075)	415 △
HSOP-11	HAT2204C	12	3.5	(0.042)	(0.052)	750 ○
	HAT2207C	20	1.5	(0.186)	(0.295)	130 △
	HAT2203C	20	2	(0.107)	(0.153)	170 △
	HAT2196C	20	2.5	(0.070)	(0.097)	285 △
	HAT2202C	20	3	(0.050)	(0.066)	520 ○
	HAT2211RP (MOS1/ MOS2+SBD)	30/30	8.0/11.0	(0.038)/ (0.023)	0.023/ 0.018	TBD/ TBD ○
	HAT2180RP (MOS1/ MOS2+SBD)	30/30	10/16	0.022/ 0.0115	0.015/ 0.0088	1090/ 3040 ○

Power MOS FET

■General Switching (FS Series)

Package	Type No.	Ratings		Characteristics		Ciss (pF) typ	Status	
		V _{DSS} (V)	ID (A)	R _{DS(on)} (Ω) max				
				4 V (4.5 V)	10 V (2.5 V)			
MP-3A	FS10ASJ-03	30	10	0.15	0.075	360	※	
	FS30ASJ-03	30	30	0.073	0.038	800	※	
	FS50AS-03	30	50	—	0.023	1300	※	
	FS50ASJ-03	30	50	0.035	0.019	1600	※	
	FS50ASJ-03F	30	50	0.019	0.0122	2100	○	
	FS5AS-06	60	5	—	0.16	280	○	
	FS5ASH-06	60	5	0.15	(0.20)	540	※	
	FS5ASJ-06	60	5	0.19	0.14	360	※	
	FS5ASJ-06F	60	5	0.19	0.14	340	○	
	FS10AS-06	60	10	—	0.078	600	○	
	FS10ASH-06	60	10	0.073	(0.095)	1150	※	
	FS10ASJ-06	60	10	0.091	0.07	800	※	
	FS10ASJ-06F	60	10	0.086	0.07	750	○	
	FS30AS-06	60	30	—	0.03	1250	○	
	FS30ASH-06	60	30	0.03	(0.039)	2000	※	
	FS30ASJ-06	60	30	0.038	0.03	1800	※	
	FS30ASJ-06F	60	30	0.028	0.022	2600	○	
	FS5AS-2	100	5	—	0.47	280	○	
	FS5ASJ-2	100	5	0.46	0.4	360	○	
	FS10AS-2	100	10	—	0.23	600	○	
	FS10ASJ-2	100	10	0.21	0.19	800	○	
	FS30AS-2	100	30	—	0.1	1250	○	
	FS30ASJ-2	100	30	0.091	0.084	1800	○	
	FS2ASJ-3	150	2	0.81	0.75	360	※	
	FS5AS-3	150	5	—	0.38	600	○	
	FS5ASJ-3	150	5	0.37	0.35	800	○	
	FS10AS-3	150	10	—	0.17	1250	○	
	FS10ASJ-3	150	10	0.165	0.16	1800	○	
	FS5AS-10A	500	5	—	1.5	700	SPL	
	TO-220	FS70UMH-03	30	70	0.014	(0.020)	4000	※
		FS70UMJ-03	30	70	0.022	0.012	2850	※
		FS100UM-03	30	100	—	0.0054	6600	※
		FS100UMJ-03F	30	100	0.0057	0.004	7600	○
		FS50UM-06	60	50	—	0.022	2300	※
FS50UMJ-06		60	50	0.024	0.02	3000	※	
FS70UM-06		60	70	—	0.0075	6540	○	
FS70UMJ-06		60	70	0.0084	0.007	8200	※	
FS70UMJ-06F		60	70	0.0083	0.007	8500	○	
FS50UM-2		100	50	—	0.055	2300	※	
FS50UMJ-2		100	50	0.052	0.048	3000	※	
FS70UM-2		100	70	—	0.02	6540	○	
FS70UMJ-2		100	70	0.018	0.017	8200	○	
FS30UM-3		150	30	—	0.092	2300	※	
FS50UM-3		150	50	—	0.031	6540	○	
FS50UMJ-3		150	50	0.031	0.03	8200	○	
TO-220FN	FS10KMH-03	30	10	0.16	(0.165)	2000	※	
	FS30KMH-03	30	30	0.046	(0.069)	1150	※	
	FS30KMJ-03	30	30	0.073	0.038	800	※	
	FS50KMJ-03	30	50	0.035	0.019	1600	※	
	FS50KMJ-03F	30	50	0.019	0.0122	2100	○	
	FS70KMJ-03	30	70	0.022	0.012	2850	※	
	FS70KMJ-03F	30	70	0.012	0.008	3250	○	
	FS100KMJ-03	30	100	0.008	0.0047	8000	※	
	FS100KMJ-03F	30	100	0.0057	0.004	7600	○	
	FS10KM-06	60	10	—	0.078	600	※	
	FS10KMJ-06	60	10	0.091	0.07	800	※	
	FS30KM-06	60	30	—	0.03	1250	※	
	FS30KMH-06	60	30	0.03	(0.039)	2000	※	
	FS30KMJ-06	60	30	0.038	0.03	1800	※	
	FS30KMJ-06F	60	30	0.028	0.022	2600	○	
	FS50KM-06	60	50	—	0.022	2300	○	
	FS50KMJ-06	60	50	0.024	0.02	3000	※	
	FS50KMJ-06F	60	50	0.018	0.014	3850	○	
	FS70KM-06	60	70	—	0.0075	6540	○	
	FS70KMJ-06	60	70	0.0084	0.007	8200	※	
	FS70KMJ-06F	60	70	0.0083	0.007	8500	○	
	FS10KMJ-2	100	10	0.21	0.19	800	※	
	FS30KM-2	100	30	—	0.1	1250	※	
	FS30KMH-2	100	30	0.093	(0.097)	2000	※	
	FS30KMJ-2	100	30	0.091	0.084	1800	○	
	FS50KM-2	100	50	—	0.055	2300	○	
	FS50KMJ-2	100	50	0.052	0.048	3000	○	
	FS70KM-2	100	70	—	0.02	6540	○	
	FS70KMJ-2	100	70	0.018	0.017	8200	○	
	FS2KMJ-3	150	2	0.81	0.75	360	※	
	FS10KM-3	150	10	—	0.17	1250	※	
	FS10KMJ-3	150	10	0.165	0.16	1800	※	
	FS30KM-3	150	30	—	0.092	2300	○	
	FS30KMJ-3	150	30	0.09	0.086	3000	○	
	FS50KM-3	150	50	—	0.031	6540	○	
	FS50KMJ-3	150	50	0.031	0.03	8200	○	
	FS3KMA-5A	250	3	—	2	300	※	

Package	Type No.	Ratings		Characteristics		Ciss (pF) typ	Status	
		V _{DSS} (V)	ID (A)	R _{DS(on)} (Ω) max				
				4 V (4.5 V)	10 V (2.5 V)			
TO-220FN	FS10KMA-5A	250	10	—	0.52	950	※	
	FS16KMA-5A	250	16	—	0.25	1850	※	
	FS20KM-5A	250	20	—	0.19	1300	○	
	FS10KM-6	300	10	—	0.68	570	※	
	FS16KM-6	300	16	—	0.33	1050	※	
	FS20KM-6A	300	20	—	0.26	1300	○	
	FS3KM-9A	450	3	—	3.5	280	○	
	FS5KM-9A	450	5	—	1.2	650	○	
	FS10KM-9A	450	10	—	0.73	1100	○	
	FS14KM-9A	450	14	—	0.52	1500	○	
	FS18KM-9A	450	18	—	0.35	2350	○	
	FS3KM-10A	500	3	—	4.4	280	○	
	FS5KM-10A	500	5	—	1.5	700	○	
	FS10KM-10A	500	10	—	0.9	1100	○	
	FS14KM-10A	500	14	—	0.64	1500	○	
	FS18KM-10A	500	18	—	0.41	2350	○	
	FS2KM-12A	600	2	—	6.4	280	○	
	FS4KM-12A	600	4	—	2.3	630	○	
	FS7KM-12A	600	7	—	1.3	1100	○	
	FS10KM-12A	600	10	—	0.94	1500	○	
	FS14KM-12A	600	14	—	0.62	2350	○	
TO-220S	FS30VSJ-03	30	30	0.073	0.038	800	※	
	FS50VSJ-03	30	50	0.035	0.019	1600	※	
	FS70VSH-03	30	70	0.014	(0.020)	4000	※	
	FS70VSJ-03	30	70	0.022	0.012	2850	※	
	FS100VSJ-03	30	100	0.008	0.0047	8000	※	
	FS100VSJ-03F	30	100	0.0057	0.004	7600	○	
	FS10VSJ-06	60	10	0.091	0.07	800	※	
	FS30VS-06	60	30	—	0.03	1250	※	
	FS30VSJ-06	60	30	0.038	0.03	1800	※	
	FS50VS-06	60	50	—	0.022	2300	※	
	FS50VSJ-06	60	50	0.024	0.02	3000	※	
	FS70VS-06	60	70	—	0.0075	6540	○	
	FS70VSJ-06	60	70	0.0084	0.007	8200	※	
	FS70VSJ-06F	60	70	0.0083	0.007	8500	○	
	FS10VSJ-2	100	10	0.21	0.19	800	※	
	FS30VS-2	100	30	—	0.1	1250	※	
	FS30VSJ-2	100	30	0.091	0.084	1800	※	
	FS50VS-2	100	50	—	0.055	2300	※	
	FS50VSJ-2	100	50	0.052	0.048	3000	○	
	FS70VS-2	100	70	—	0.02	6540	○	
	FS70VSJ-2	100	70	0.018	0.017	8200	○	
	FS30VS-3	150	30	—	0.092	2300	※	
	FS30VSJ-3	150	30	0.09	0.086	3000	○	
	FS50VS-3	150	50	—	0.031	6540	○	
	FS50VSJ-3	150	50	0.031	0.03	8200	○	
	FS10VS-5	250	10	—	0.52	570	※	
	FS16VS-5	250	16	—	0.25	1050	※	
	FS20VS-5A	250	20	—	0.19	1300	○	
	FS10VS-6	300	10	—	0.68	570	※	
	FS16VS-6	300	16	—	0.33	1050	※	
	FS20VS-6A	300	20	—	0.26	1300	○	
	FS10VS-9A	450	10	—	0.73	1100	△	
	FS5VS-10A	500	5	—	1.5	700	※	
	FS10VS-10A	500	10	—	0.9	1100	△	
	FS14VS-10A	500	14	—	0.64	1500	○	
	FS4VS-12A	600	4	—	2.3	630	○	
	FS7VS-12A	600	7	—	1.3	1100	○	
	FS10VS-12A	600	10	—	0.94	1500	○	
	LDBAK(S)- (1)	FS14VS-9A	450	14	—	0.52	1500	○
		FS12VS-7A	350	12	—	0.50	1050	SPL
	TO-3P*	FS16VS-7A	350	16	—	0.35	1500	SPL
		FS50SMJ-03	30	50	0.035	0.019	1600	※
		FS70SMJ-03	30	70	0.022	0.012	2850	※
		FS100SMJ-03	30	100	0.008	0.0047	8000	※
		FS50SM-06	60	50	—	0.022	2300	※
		FS50SMJ-06	60	50	0.024	0.02	3000	※
FS70SM-06		60	70	—	0.0075	6540	○	
FS70SMJ-06		60	70	0.0084	0.007	8200	※	
FS50SM-2		100	50	—	0.055	2300	※	
FS50SMJ-2		100	50	0.052	0.048	3000	※	
FS70SM-2		100	70	—	0.02	6540	○	
FS70SMJ-2		100	70	0.018	0.017	8200	○	
FS30SM-3		150	30	—	0.092	2300	※	
FS50SM-3		150	50	—	0.031	6540	○	
FS50SMJ-3		150	50	0.031	0.03	8200	○	
FS50SM-5A		250	50	—	0.068	3500	○	
FS40SM-6A		300	40	—	0.105	3500	○	
FS25SM-9A		450	25	—	0.16	4600	○	
FS25SM-10A		500	25	—	0.2	4600	○	
FS22SM-12A		600	22	—	0.3	4600	○	

Power MOS FET

■General Switching (FX Series)

Package	Type No.	Ratings		Characteristics			Status
		V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) max		C _{iss} (pF) typ	
				4 V (4.5 V)	10 V (2.5 V)		
MP-3A	FX6ASJ-03	-30	-6	0.62	0.29	550	○
	FX20ASJ-03F	-30	-20	0.29	0.13	500	○
	FX30ASJ-03	-30	-30	0.12	0.061	2460	○
	FX6ASJ-06	-60	-6	0.37	0.21	1040	○
	FX20ASJ-06	-60	-20	0.166	0.097	2370	○
	FX6ASJ-2	-100	-6	0.72	0.58	1110	○
	FX20ASJ-2	-100	-20	0.32	0.26	2360	○
	FX3ASJ-3	-150	-3	1.32	1.2	1170	○
	FX6ASJ-3	-150	-6	0.59	0.53	2420	○
TO-220F N	FX20KMJ-03	-30	-20	0.29	0.13	1130	○
	FX30KMJ-03	-30	-30	0.12	0.061	2460	○
	FX50KMJ-03	-30	-50	0.072	0.035	4270	○
	FX70KMJ-03	-30	-70	0.025	0.0123	11140	○
	FX6KMJ-06	-60	-6	0.37	0.21	1040	○
	FX20KMJ-06	-60	-20	0.166	0.097	2370	○

Package	Type No.	Ratings		Characteristics			Status
		V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) max		C _{iss} (pF) typ	
				4 V (4.5 V)	10 V (2.5 V)		
TO-220F N	FX30KMJ-06	-60	-30	0.092	0.054	4210	○
	FX50KMJ-06	-60	-50	0.032	0.0189	11610	○
	FX6KMJ-2	-100	-6	0.72	0.58	1110	○
	FX20KMJ-2	-100	-20	0.32	0.26	2360	○
	FX30KMJ-2	-100	-30	0.176	0.143	4450	○
	FX50KMJ-2	-100	-50	0.061	0.05	11130	○
	FX6KMJ-3	-150	-6	0.59	0.53	2420	○
	FX20KMJ-3	-150	-20	0.32	0.29	4470	○
	FX30KMJ-3	-150	-30	0.111	0.1	11430	○
	TO-220S	FX20VSJ-3	-150	-20	0.32	0.29	4470
TO-3P*	FX50SMJ-03	-30	-50	0.072	0.035	4270	○
	FX70SMJ-03	-30	-70	0.025	0.0123	11140	○
	FX50SMJ-06	-60	-50	0.032	0.0189	11610	○
	FX50SMJ-2	-100	-50	0.061	0.05	11130	○
	FX30SMJ-3	-150	-30	0.111	0.1	11430	○

■General Switching (FK Series)

Package	Type No.	Ratings		Characteristics			Status
		V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) max		C _{iss} (pF) typ	
				4 V (4.5 V)	10 V (2.5 V)		
TO-220	FK16UM-5▲	250	16	—	0.31	1050	※
	FK20UM-5▲	250	20	—	0.24	1400	※
	FK16UM-6▲	300	16	—	0.41	1050	※
	FK20UM-6▲	300	20	—	0.33	1400	※
	FK10UM-9▲	450	10	—	0.92	1100	※
	FK14UM-9▲	450	14	—	0.65	1500	※
	FK10UM-10▲	500	10	—	1.13	1100	※
	FK14UM-10▲	500	14	—	0.80	1500	※
	FK7UM-12▲	600	7	—	1.63	1100	※
	FK10UM-12▲	600	10	—	1.18	1500	※
TO-220F N	FK16KM-5▲	250	16	—	0.31	1050	○
	FK20KM-5▲	250	20	—	0.24	1400	○
	FK16KM-6▲	300	16	—	0.41	1050	○
	FK20KM-6▲	300	20	—	0.33	1400	○
	FK10KM-9▲	450	10	—	0.92	1100	○
	FK14KM-9▲	450	14	—	0.65	1500	○
	FK10KM-10▲	500	10	—	1.13	1100	○
	FK14KM-10▲	500	14	—	0.80	1500	○
	FK7KM-12▲	600	7	—	1.63	1100	○
	FK10KM-12▲	600	10	—	1.18	1500	○
TO-220S	FK16VS-5▲	250	16	—	0.31	1050	○
	FK20VS-5▲	250	20	—	0.24	1400	○
	FK16VS-6▲	300	16	—	0.41	1050	○
	FK20VS-6▲	300	20	—	0.33	1400	○
	FK10VS-9▲	450	10	—	0.92	1100	○

Package	Type No.	Ratings		Characteristics			Status
		V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) max		Ciss (pF) typ	
				4 V (4.5 V)	10 V (2.5 V)		
TO-220S	FK14VS-9▲	450	14	—	0.65	1500	○
	FK10VS-10▲	500	10	—	1.13	1100	○
	FK14VS-10▲	500	14	—	0.80	1500	○
	FK7VS-12▲	600	7	—	1.63	1100	○
	FK10VS-12▲	600	10	—	1.18	1500	○
TO-3P*	FK16SM-5▲	250	16	—	0.31	1050	※
	FK20SM-5▲	250	20	—	0.24	1400	※
	FK25SM-5▲	250	25	—	0.16	2100	○
	FK30SM-5▲	250	30	—	0.108	2850	○
	FK16SM-6▲	300	16	—	0.41	1050	※
	FK20SM-6▲	300	20	—	0.33	1400	※
	FK25SM-6▲	300	25	—	0.21	2100	○
	FK30SM-6▲	300	30	—	0.143	2850	○
	FK10SM-9▲	450	10	—	0.92	1100	※
	FK14SM-9▲	450	14	—	0.65	1500	※
	FK18SM-9▲	450	18	—	0.41	2200	○
	FK20SM-9▲	450	20	—	0.30	2800	○
	FK10SM-10▲	500	10	—	1.13	1100	※
	FK14SM-10▲	500	14	—	0.80	1500	※
	FK18SM-10▲	500	18	—	0.50	2200	○
	FK20SM-10▲	500	20	—	0.36	2800	○
	FK7SM-12▲	600	7	—	1.63	1100	※
	FK10SM-12▲	600	10	—	1.18	1500	※
	FK14SM-12▲	600	14	—	0.75	2100	○
	FK18SM-12▲	600	18	—	0.54	2800	○

■General Switching (FY Series)

Package	Type No.	Ratings		Characteristics			Status
		VDSS (V)	ID (A)	RDS(on) (Ω) max		Ciss (pF) typ	
				4 V (4.5 V)	10 V (2.5 V)		
SOP-8*	FY4AEJ-03 [D]	±30	±4	0.055/ 0.18	0.03/ 0.08	550/ 680	○
	FY5AEJ-03 [D]	±30	±5	0.055/ 0.135	0.03/ 0.065	550/ 870	※
	FY4ADJ-03A [D]	-30	-4	0.18	0.08	680	○
	FY3ACJ-03F [D]	30	3	0.12	0.07	260	SPL

Package	Type No.	Ratings		Characteristics			Status
		VDSS (V)	ID (A)	RDS(on) (Ω) max		Ciss (pF) typ	
				4 V (4.5 V)	10 V (2.5 V)		
SOP-8*	FY5ACJ-03F [D]	30	5	0.048	0.027	600	○
	FY6ACJ-03A [D]	30	6	0.04	0.023	1000	○
	FY8AAJ-03F	30	8	0.05	0.028	600	○
	FY10AAJ-03F	30	10	0.028	0.018	1200	○
	FY12AAJ-03F	30	12	0.02	0.0115	1800	○
	FY14AAJ-03F	30	14	0.014	0.0081	2700	○

Power MOS FET

■General Amplification

Package	Type No.	Ratings		Characteristics			Status
		V _{DSS} (V)	I _D (A)	I _{YFS} (S) typ	V _{DS(sat)} (V _{DS(on)}) (V) max	C _{iss} (pF) typ	
TO-220 AB	2SJ76	(-140)	-0.5	0.035	-2	120	○
	2SJ77	(-160)	-0.5	0.035	-2	120	○
	2SJ78	(-180)	-0.5	0.035	-2	120	○
	2SJ79	(-200)	-0.5	0.035	-2	120	○
	2SK213	(140)	0.5	0.04	2	90	○
	2SK214	(160)	0.5	0.04	2	90	○
	2SK215	(180)	0.5	0.04	2	90	○
	2SK216	(200)	0.5	0.04	2	90	○
TO-3P	2SJ160	(-120)	-7	1.0	-12	900	○

Package	Type No.	Ratings		Characteristics			Status
		V _{DSS} (V)	I _D (A)	I _{YFS} (S) typ	V _{DS(sat)} (V _{DS(on)}) (V) max	C _{iss} (pF) typ	
TO-3P	2SJ161	(-140)	-7	1.0	-12	900	○
	2SJ162	(-160)	-7	1.0	-12	900	○
	2SJ351	(-180)	-8	1.0	-12	800	○
	2SJ352	(-200)	-8	1.0	-12	800	○
	2SK1056	(120)	7	1.0	12	600	○
	2SK1057	(140)	7	1.0	12	600	○
	2SK1058	(160)	7	1.0	12	600	○
	2SK2220	(180)	8	1.0	12	600	○
	2SK2221	(200)	8	1.0	12	600	○

■Arrays

Package	Type No.	Ratings		Characteristics			Status
		V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) max		C _{iss} (pF) typ	
SP-10	4AM13 (Nch/Pch)	60/ -60	3.0/ -3.0	0.5/ 0.55	0.35/ 0.4	240/ 400	
	4AM11 (Nch/Pch)	60/ -60	5.0/ -5.0	0.24/ 0.27	0.17/ 0.2	400/ 900	
	4AM12 (Nch/Pch)	60/ -60	8.0/ -8.0	0.11/ 0.18	0.075/ 0.12	860/ 1400	
	4AK25	60	1.5	0.6	0.45	140	
	4AK18	60	2.5	0.53	0.38	240	
	4AK16	60	5.0	0.25	0.18	400	
	4AK15	60	8.0	0.095	0.07	860	
	4AK17	60	10	0.065	0.045	1400	
	4AK20	100	5.0	0.35	0.25	525	
	4AK21	100	8.0	0.125	0.09	1300	
	4AK22	120	3	0.55	0.40	420	
	4AK19	120	5.0	0.6	0.5	—	
SP-12	4AM17	-60/ 60	-8/ 8	0.27/ 0.24	0.20/ 0.17	17/ 33	
	4AJ11	-60	8.0	0.17	0.13	1400	
	6AM11 (Nch/Pch)	60/ -60	5.0/ -5.0	0.24/ 0.27	0.17/ 0.2	400/ 900	
	4AK26	60	8.0	0.075	0.06	1400	

Package	Type No.	Ratings		Characteristics			Status
		V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) max		C _{iss} (pF) typ	
SP-12TA	6AM12 (Nch/Pch)	60/ -60	7.0/ -7.0	0.24/ 0.27	0.17/ 0.2	400/ 900	
	6AM14 (Nch/Pch)	60/ -60	7.0/ -7.0	0.2/ 0.16	(0.5)/ (0.3)	500/ 1450	
	4AM14 (Nch/Pch)	60/ -60	8.0/ -8.0	0.24/ 0.27	0.17/ 0.2	400/ 900	
	6AM13 (Nch/Pch)	60/ -60	10/ -10	0.11/ 0.18	0.075/ 0.12	860/ 1400	
	6AM15 (Nch/Pch)	60/ -60	10/ -10	0.115/ 0.165	0.06/ 0.105	500/ 850	
	4AM15 (Nch/Pch)	200/ -200	4.0/ -4.0	—	0.5/ 0.9	750/ 920	

■Thermal FET

Package	Type No.	Ratings		Characteristics			Status
		V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) max		T _{sd} (°C) typ	
TO-220 AB	HAF1001	-60	-15	0.13	0.09	175	○
	HAF2001	60	20	0.065	0.043	175	○
	HAF2014	60	40	0.033	0.02	175	○
TO-220 FM	HAF2002	60	20	0.065	0.043	175	○
LDBAK(L)/ (S)-(1)	HAF2005	60	40	0.033	0.02	175	○
	HAF1002(L)/(S)	-60	-15	0.13	0.09	175	○
	HAF1008(L)/(S)	-60	-20	0.08	0.054	175	○
	HAF1009(L)/(S)	-60	-40	0.05	0.027	175	○

Package	Type No.	Ratings		Characteristics			Status
		V _{DSS} (V)	I _D (A)	R _{DS(on)} (Ω) max		T _{sd} (°C) typ	
LDBAK(L)/ (S)-(1)	HAF2012(L)/(S)	60	20	0.065	0.043	175	○
	HAF2017(L)/(S)	60	20	0.053	0.043	175	○
	HAF2011(L)/(S)	60	40	0.033	0.02	175	○
	HAF2021(L)/(S)	60	50	0.015 (6V)	0.012	175	○
DPAK(L)-(1)/ (S)	HAF1004(L)/(S)	-60	-5	0.34	0.2	175	○
	HAF2007(L)/(S)	60	5	0.12	0.075	175	○
FP-8DA	HAF2015RJ	60	2	(0.2)	0.16	175	

注) ○: 正在批量生产

SPL: 正在提供样品

: 可以批量生产 (交货期为 3 个月)

: 限定品种

: 大量订货对象品种 (订货单位: 请参照第 19 页所载的发货数量)

IGBT

■General Switching

Package	Type No.	Ratings		Characteristics		Status
		V _{CES} (V)	I _C (A)	V _{CE(sat)} (V) typ	t _f (μs) typ	
TO-220 AB	2SH26	600	10	2.1	0.3	
	2SH27	600	15	2.1	0.3	
	2SH28	600	20	2.1	0.3	
	2SH29	600	30	2.1	0.3	

Package	Type No.	Ratings		Characteristics		Status
		V _{CES} (V)	I _C (A)	V _{CE(sat)} (V) typ	t _f (μs) typ	
LDBAK(L)/ (S)-(1)	GN2550V4LD/LS	250	50	1.6	0.12	SPL
	GN6020V4LD/LS	600	20	2.1	0.1	○
	GN6030V4LD/LS	600	30	2.1	0.1	○
TO-3P	2SH30	600	50	2.1	0.3	
	2SH31	600	75	2.1	0.3	

■Strobes

Package	Type No.	Ratings			Status
		V _{CES} (V)	I _{CP} (A)	Drive (V)	
DPAK(L)-3	CT20ASJ-8	400	130	4	SPL
	CT25ASJ-8	400	150	4	SPL
SOP-8*	CY20AAJ-8	400	130	4	○
	CY20AAJ-8F	400	130	4	○
	CY20AAJ-8H	400	130	4	○
	CY25AAJ-8	400	150	4	○
	CY25AAJ-8F	400	150	4	○

Package	Type No.	Ratings			Status
		V _{CES} (V)	I _{CP} (A)	Drive (V)	
TO-220F	CT40TMH-8	400	200	30	
TSSOP-8	CY25BAH-8F	400	150	2.5	○
	CY25BAJ-8F	400	150	4	○
TO-220FN	CT40KM-8H	400	200	30	

■Rice Cookers/ Micro Wave Ovens

Package	Type No.	Ratings		Characteristics		Status
		V _{CES} (V)	I _C (A)	V _{CE(sat)} (V) typ	E _{tail} (mJ/ pulse)	
TO-3PL*	CT60AM-18C	900	60	2.70	1.00	○
	CT60AM-18F	900	60	2.70	1.00	○
	CT80AM-20	950	60	2.75	0.65	○

Triacs

■General Switching

Package	Type No.	Ratings			Characteristics		Status
		V _{DRM} (V)	I _T (RMS) (A)	I _{TSM} (A)	I _{GT} (max) (mA)	V _{GT} (max) (V)	
16P4	AY08B4-12	600	0.8	8	(,) 7	(,) 2	
MP-3A	BCR3AS-12	600	3	30	15	1.5	○
	BCR5AS-12	600	5	50	30	1.5	○
DPAK(L)-3	BCR3AS-12	600	3	30	15	1.5	
	BCR5AS-12	600	5	50	30	1.5	
SOT-89	BCR08AS-12	600	0.8	8	5	2	○
TO-220	BCR5AM-12L	600	5	50	20	1.5	○
	BCR6AM-12L	600	6	60	30	1.5	○
	BCR8CM-12L	600	8	80	30	1.5	○
	BCR10CM-12L	600	10	100	30	1.5	○
	BCR12CM-12L	600	12	120	30	1.5	○
	BCR16CM-12L	600	16	170	30	1.5	○
	BCR20AM-12L	600	20	200	30	1.5	○
	BCR2PM-12	600	2	10	(,) 10	1.5	○
TO-220F	BCR3PM-12L	600	3	30	20	1.5	
	BCR5PM-12L	600	5	50	20	1.5	
	BCR8PM-12L	600	8	80	30	1.5	
	BCR10PM-12L	600	10	100	30	1.5	
	BCR12PM-12L	600	12	120	30	1.5	
	BCR16PM-12L	600	16	160	30	1.5	
	BCR5PM-14L	700	5	50	30	1.5	
	BCR8PM-14L	700	8	80	30	1.5	
	BCR12PM-14L	700	12	120	30	1.5	
	BCR8PM-16L	800	8	80	30	1.5	
	BCR8PM-20L	1000	8	80	30	1.5	
	BCR3KM-12	600	3	30	15	1.5	○
	BCR3KM-12LA/LB	600	3	30	20	1.5	

触发模式
 : G⁺, T2⁺
 : G⁻, T2⁻
 : G⁺, T2⁻
 : G⁻, T2⁺

Package	Type No.	Ratings			Characteristics		Status
		V _{DRM} (V)	I _T (RMS) (A)	I _{TSM} (A)	I _{GT} (max) (mA)	V _{GT} (max) (V)	
TO-220FN	BCR5KM-12	600	5	50	15	2.5	○
	BCR5KM-12LA/LB	600	5	50	20	1.5	
	BCR8KM-12LA/LB	600	8	80	30	1.5	
	BCR8KM-12LC	600	8	48	50	1.5	○
	BCR10KM-12LA/LB	600	10	100	30	1.5	
	BCR10KM-12LC	600	10	60	50	1.5	○
	BCR12KM-12LA/LB	600	12	120	30	1.5	
	BCR16KM-12LA/LB	600	16	160	30	1.5	
	BCR16KM-12LC	600	16	96	50	1.5	○
	BCR20KM-12L	600	20	200	30	1.5	○
	BCR3KM-14L	700	3	30	30	1.5	○
	BCR5KM-14LA/LB	700	5	50	30	1.5	
	BCR5KM-14LC	700	5	30	50	1.5	○
	BCR8KM-14LA	700	8	80	30	1.5	
	BCR8KM-14LC	700	8	48	50	1.5	○
	BCR12KM-14LA	700	12	120	30	1.5	
	BCR8KM-16LA	800	8	80	30	1.5	
	BCR8KM-20LA	1000	8	80	30	1.5	
TO-220S	BCR8CS-12L	600	8	80	30	1.5	○
	BCR10CS-12L	600	10	100	30	1.5	○
	BCR12CS-12L	600	12	120	30	1.5	○
	BCR16CS-12L	600	16	170	30	1.5	○
TO-3P*	BCR30AM-12L	600	30	300	50	1.5	○
TO-92*	BCR08AM-12	600	0.8	8	(,) 5	(,) 2	○
	BCR1AM-12	600	1	10	7	2	○
	BCR08AM-14	700	0.8	8	5	2.0	○

Thyristors

■General Switching

Package	Type No.	Ratings			Characteristics		Status
		V _{DRM} (V)	I _T (AV) (A)	I _{TSM} (A)	I _{GT} (max) (mA)	V _{GT} (max) (V)	
MP-3A	CR6AS-8	400	—	—	10	1.5	
	CR3AS-12	600	3	90	0.1	0.8	
	CR5AS-12	600	5	90	0.1	0.8	○
DPAK(L)-3	CR3AS-12	600	3	90	0.1	0.8	
	CR5AS-12	600	5	90	0.1	0.8	
SC-59	CR05BS-8	400	0.1	10	0.1	0.8	○
SOT-89	CR05AS-8	400	0.5	10	0.1	0.8	○
	CR08AS-12	600	0.8	10	0.1	0.8	○
TO-220	CR12CM-12	600	12	360	30	1.5	○
TO-220F	CR3PM-12	600	3	70	0.1	0.8	
	CR6PM-12	600	6	90	10	1.0	
	CR8PM-12	600	8	120	15	1.0	

注) ○: 正在批量生产

SPL: 正在提供样品

: 可以批量生产 (交货期为 3 个月)

: 限定品种

: 大量订货对象品种 (订货单位: 请参照第 19 页所载的发货数量)

Package	Type No.	Ratings			Characteristics		Status
		V _{DRM} (V)	I _T (AV) (A)	I _{TSM} (A)	I _{GT} (max) (mA)	V _{GT} (max) (V)	
TO-92*	CR02AM-8	400	0.3	10	0.1	0.8	○
	CR03AM-12	600	0.3	20	0.1	0.8	○
	CR05AM-12	600	0.3	10	0.1	0.8	○
	CR04AM-12	600	0.4	10	0.1	0.8	○
	CR03AM-16	800	0.3	20	0.1	0.8	○
	CR05AM-16	800	0.3	10	0.1	0.8	○
TO-220FN	CR3KM-12	600	3	70	0.1	0.8	
	CR6KM-12	600	6	90	10	1.0	
	CR8KM-12	600	8	120	15	1.0	

RF Power Modules

■ High Frequency Amplification

Part No.	Package	Main Characteristics				Status
		f (MHz)	Pin (dBm)	Pout Min (dBm)	VDD (V)	
PF08122B	RF-K-8	880 ~ 915 1710 ~ 1785	0	35 32.5	3.5	○
PF08123B	RF-K-8	880 ~ 915 1710 ~ 1785 1850 ~ 1910	0	35 32.5 32	3.5	○
PF08127B	RF-Q-8	880 ~ 915 1710 ~ 1785 1850 ~ 1910	0	35 32.5 32	35	○

Standard Taping Specifications

■ Packing Unit

Package	Name Note)	Packing Unit
TO-92	型号 + 等级 + TZ	2500 Pcs/Box
TO-92 MOD	Type No. + Grade + TZ	
MPAK	型号 + 标志 + TL/TR	3000 Pcs/Reel
MPAK-4	Type No. + Marking + TL/TR	
CMPAK	型号 + 标志 + UL/UR	12000 Pcs/Reel
CMPAK-4	Type No. + Marking + UL/UR	
CMPAK-6		
MPAK-5		
MFPK	型号 + 标志 + TL/TR	9000 Pcs/Reel
	Type No. + Marking + TL/TR	
SMFPAK-6	型号 + 标志 + TL/TR	5000 Pcs/Reel
	Type No. + Marking + TL/TR	
EMFPAK-6	型号 + 标志 + TL/TR	5000 Pcs/Reel
	Type No. + Marking + TL/TR	
MPAK-5	型号 + 标志 + EL	3000 Pcs/Reel
MPAK-6	Type No. + Marking + EL	
(High frequency linear IC)		
TSOP-6	型号 + EL	3000 Pcs/Reel
CMFPAK-6	Type No. + EL	
TSSOP-14	型号 + EL	1000 Pcs/Reel
(High frequency linear IC)	Type No. + EL	

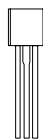
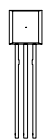
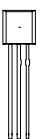
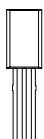
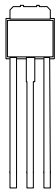
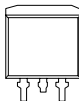
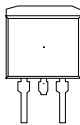
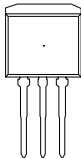
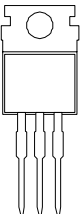
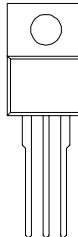
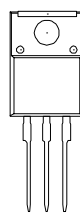
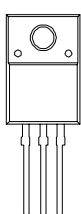
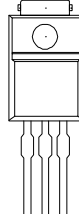
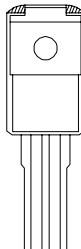
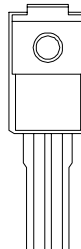
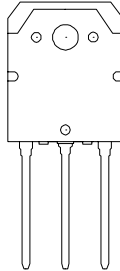
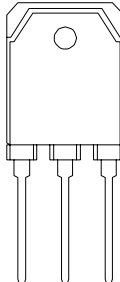
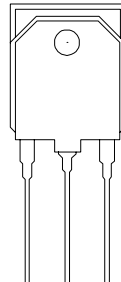
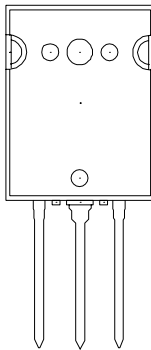
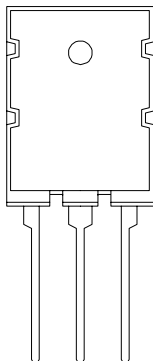
Package	Name Note)	Packing Unit
FP-8DA	型号 + EL	2500 Pcs/Reel
(JEDEC, SOP-8)	Type No. + EL	
LFPK	型号 + EL	2500 Pcs/Reel
	Type No. + EL	
TTP-8D	型号 + EL	3000 Pcs/Reel
(TSSOP-8)	Type No. + EL	
DPAK S	型号 + TL/TR	3000 Pcs/Reel
	Type No. + TL/TR	
LDPK S	型号 + TL/TR	1000 Pcs/Reel
	Type No. + TL/TR	
UPAK	型号 + 标志 + TL/TR	1000 Pcs/Reel
	Type No. + Marking + TL/TR	
	型号 + 标志 + UL/UR	4000 Pcs/Reel
	Type No. + Marking + UL/UR	
RP-8P	型号 + 标志 + TB	1000 Pcs/Reel
	Type No. + Marking + TB	
	型号 + 标志 + UB	4000 Pcs/Reel
	Type No. + Marking + UB	
HSOP-11	型号 + EL	2500 Pcs/Reel
	Type No. + EL	

Note) Lead (Pb) free: + "–E"

Package	Name Note)	Packing Unit
TO-92*	型号 + TB	2000 Pcs/Box
	Type No. + TB	
SC-59	型号 + T1/T2	3000 Pcs/Reel
	Type No. + T1/T2	
SOT-89	型号 + T1/T2	3000 Pcs/Reel
	Type No. + T1/T2	1000 Pcs/Reel
MP-3A	型号 + T1/T2	3000 Pcs/Reel
	Type No. + T1/T2	

Package	Name Note)	Packing Unit
TO-220S	型号 + T1/T2	1000 Pcs/Reel
	Type No. + T1/T2	
TSSOP-8	型号 + T1/T2	3000 Pcs/Reel
	Type No. + T1/T2	
SOP-8*	型号 + T1/T2	3000 Pcs/Reel
	Type No. + T1/T2	

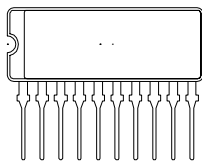
Package

TO-92*  5.0×17.5 (5.0×5.0)	TO-92(1)  4.8×17.7 (4.8×5.0)	TO-92(2)  4.8×17.7 (4.8×5.0)	TO-92MOD (JEITA: SC-51)  4.8×18.1 (4.8×8.0)	EMFPAK-6  1.2×1.0 (1.2×0.8)	MFPAK (1408扁平)  1.4×1.2 (1.4×0.8)	SMFPAK-6  1.5×1.5 (1.5×1.1)			
CMPAK (JEITA: SC-70)  2.0×2.1 (2.0×1.25)	CMPAK-4 (JEITA: SC-82AB)  2.0×2.1 (2.0×1.25)	CMPAK-6  2.0×2.1 (2.0×1.25)	CMFPAK-6  2.0×2.1 (2.0×1.7)	SC-59  2.9×2.5 (2.9×1.5)	MPAK (JEITA: SC-59A)  2.95×2.8 (2.95×1.5)	MPAK-4 (JEITA: SC-61 44)  2.95×2.8 (2.95×1.5)	TSOP-6  2.95×2.8 (2.95×1.6)		
UPAK  4.5×4.25 (4.5×2.5)	SOT-89  4.6×4.2 (4.6×2.5)	TTP-8D (TSSOP-8)  3.0×6.4 (3.0×4.4)	TSSOP-8  3.0×6.4 (3.0×4.4)	FP-8DA (JEDEC: SOP-8)  4.9×6.1 (4.9×3.95)	 5.0×6.0 (5.0×4.4)	 4.9×6.1 (4.9×3.95)	FP-11DTV (HSOP-11)  8.65×6.1 (8.65×3.95)	16P4  7.62×19 (6.3×19)	MP-3A  6.5×10 (6.5×5.5)
DPAK(S)  6.5×9.5 (6.5×5.5)	DPAK(L)-(1)  6.5×23.4 (6.5×5.5)	DPAK(L)-(2)  6.5×23.4 (6.5×5.5)	DPAK(L)-(3)  6.5×23.1 (6.5×5.5)	LDPAK(S)-(1)  10.2×13.0 (10.2×8.6)	LDPAK(S)-(2)  10.5×12.8 (10.5×8.6)	TO-220S  10.5×12.8 (10.5×8.6)	LDPAK(L)  10.2×22.6 (10.2×8.6)		
TO-220AB  11.5×29 (11.5×8.6)	TO-220  10.5×28.5 (10.5×9)	TO-220C-FM  10×28.6 (10×9)	TO-220FN  10×29 (10×8.5)	TO-220FM  10×31 (10×8.5)	TO-220F  10.5×30.5 (10.5×8.5)	 10.5×30.5 (10.5×8.5)			
TO-3P  15.6×37.9 (15.6×12)	TO-3P*  15.9×39.5 (15.9×14)	TO-3PFM  15.6×40.9 (15.6×14.9)	TO-3PL  20×46 (20×18.5)	TO-3PL*  20×46 (20×18.5)					

- 注) 1. 上記外形图并非原尺寸。
 2. 单位 mm 为参考值(长×宽)。() 尺寸是外形尺寸。
 3. 详细内容请参考 Data Sheet。

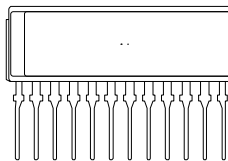
TRASISTER ARRAY

SP-10



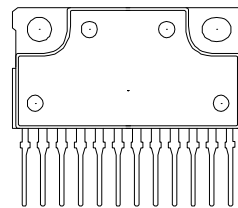
26.15 × 20.5
(26.5 × 10)

SP-12



31.0 × 20.5
(31.0 × 10)

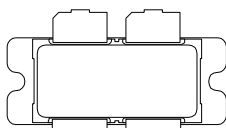
SP-12TA



31.3 × 26.5
(31.3 × 10)

RF POWER TRANSISTER

RFPK-F



38.8 × 24.4
(28.4 × 12.8)

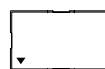
RP8P



5.2 × 5.6
(5.2 × 3.4)

RF POWER MODULE

RF-K-8



13.75 × 8.0 × 1.6(高)

RF-Q



10.0 × 8.0 × 1.5(高)

- 注) 1. 上記外形図并非原寸大。
2. 单位 mm 为参考值(长×宽)。()尺寸是外形尺寸。
3. 详细内容请参考 Data Sheet 。

Surface Mount Type Marking

■MPAK

Type No.	Marking
2SA1052	MB, MC, MD
2SA1121	SB, SC, SD
2SA1122	CC, CD, CE
2SA1171	PD, PE
2SA1484	IRD, IRE
2SA1566	JID, JIE
2SA1617	VIB, VIC
2SB831	BB, BC
2SB1691	WL-
2SC2462	LB, LC, LD
2SC2463	DD, DE, DF
2SC2618	RB, RC, RD
2SC2619	FA, FB, FC
2SC2620	QB, QC
2SC2732	EC
2SC2734	GC
2SC2735	JC
2SC2736	TC
2SC2776	VA, VB, VC
2SC3127	ID-
2SC3513	IS-
2SC3793	IP-
2SC4050	KID, KIE
2SC4196	QI-
2SC4197	TI-
2SC4366	ZI-
2SC4591	XM-
2SC4680	XU-
2SC4702	XV-
2SC4964	YV-
2SC5049	YA-
2SC5050	YZ-
2SC5218	YK-
2SC5772	FR-
2SC5773	JR-
2SC5890	FS-
2SC5998	YC-
2SD1101	AB, AC
2SD1306	ND, NE
2SD2655	WM-
2SJ399	ZF-
2SJ451	ZK-
2SJ452	ZM-
2SJ486	ZU-
2SJ574	BP
2SJ575	AP
2SK217	ZC, ZD, ZE
2SK360	IGD, IGE, IGF
2SK1070	PIB, PIC, PID, PIE
2SK2373	ZE-
2SK2569	ZN-
2SK2570	ZL-
2SK2802	ZV-
2SK2980	ZZ-
2SK3000	ZY-
2SK3287	AN
2SK3288	EN
2SK3290	BN
BRA114EMP	EG
BRA123EMP	JG
BRA124EMP	CG
BRA143EMP	GG
BRA144EMP	AG
BRC114EMP	FG
BRC123EMP	KG
BRC124EMP	DG
BRC143EMP	HG
BRC144EMP	BG

■MPAK-4

Type No.	Marking
2SC4926	YD-
2SC5080	ZD-
2SC5545	ZS-
3SK295	ZQ-
3SK297	ZP-
3SK300	ZR-
3SK319	YB-
BB101M	AU-
BB102M	BU-
BB301M	AW-
BB302M	BW-
BB304M	DW-
BB305M	EW-
BB501M	AS-
BB502M	BS-
BB503M	CS-
BB504M	DS-
BIC702M	BZ-
BIC703M	CZ-

■MPAK-5

Type No.	Marking
HA22022	GDA (A: 制造月编码可变 Manufactured date)
HA22033	GEA (A: 制造月编码可变 Manufactured date)

■MPAK-6

Type No.	Marking
HA22040	GH

■UPAK

Type No.	Marking
2SB1001	BH, BJ
2SB1002	CH, CJ
2SB1025	DH, DJ, DK
2SB1026	DL, DM
2SB1028	EL, EM
2SB1048	BT
2SC3380	AS
2SC4807	ER
2SC4988	FR
2SC5631	JR
2SD1367	BA, BB, BC
2SD1368	CA, CB, CC
2SD1418	DA, DB, DC
2SD1419	DD, DE
2SD1421	ED, EE
2SD1470	AT
2SD1472	CT
2SD1974	ES
2SJ186	CY
2SJ244	JY
2SJ278	MY
2SJ317	NY
2SJ484	WY
2SJ517	YY
2SJ518	AZ
2SK1334	BY
2SK1579	DY
2SK1697	EY
2SK1698	FY
2SK1764	KY
2SK1772	HY
2SK2247	QY
2SK2315	TY
2SK2788	VY
2SK2978	ZY
2SK3391	JX

■RP8P

Type No.	Marking
2SK3390	IX

■CMPAK

Type No.	Marking
2SA2080	MB, MC, MD
2SA2081	CC, CD, CE
2SC4260	TI-
2SC4261	QI-
2SC4262	IP-
2SC4264	GC
2SC4265	JC
2SC4537	IS-
2SC4593	XM-
2SC4784	YA-
2SC4899	YH-
2SC4901	YK-
2SC4965	YV-
2SC5051	YZ-
2SC5850	LB, LC, LD
2SC5851	FA, FB, FC
2SC5852	QB, QC
2SJ576	AP
2SJ586	CP
2SK1215	IGD, IGE, IGF
2SK3289	AN
2SK3348	CN
2SK3378	EN
BRA114ECM	EG
BRA123ECM	JG
BRA124ECM	CG
BRA143ECM	GG
BRA144ECM	AG
BRC114ECM	FG
BRC123ECM	KG
BRC124ECM	DG
BRC143ECM	HG
BRC144ECM	BG

■CMPAK-4

Type No.	Marking
2SC4995	YD-
2SC5081	ZD-
2SC5593	XH-
2SC5594	XP-
2SC5623	WH-
2SC5624	VH-
2SC5820	WU-
2SC5894	WY-
2SK2685	ZT-
3SK296	ZQ-
3SK298	ZP-
3SK309	XV-
3SK317	ZR-
3SK318	YB-
BB101C	AU-
BB301C	AW-
BB304C	DW-
BB305C	EW-
BB501C	AS-
BB502C	BS-
BB503C	CS-
BB504C	DS-
BIC702C	BZ-
BIC703C	CZ-
HSG2001	UF-

■CMPAK-6

Type No.	Marking
TBB1002	BM
TBB1004	DM
TBB1005	EM
TBB1008	HM
TBB1010	KM

■MFPK

Type No.	Marking
2SC5543	YA-
2SC5544	YZ-
2SC5554	YH-
2SC5555	ZD-
2SC5628	XZ-
2SC5700	WB-
2SC5702	ZS-
2SC5757	WE-
2SC5758	WF-
2SC5812	WG-
2SC5849	WY-
2SC5872	WZ-

■CMFPAK-6

Type No.	Marking
HAT1058C	058
HAT1059C	059
HAT1068C	068
HAT1069C	069
HAT1089C	VK-
HAT1090C	VJ-
HAT1091C	VL-
HAT1093C	VM-
HAT1094C	VN-
HAT1095C	VP-
HAT1096C	VQ-
HAT2196C	VS-
HAT2202C	VR-
HAT2203C	VT-
HAT2204C	VU-
HAT2205C	VV-
HAT2206C	VW-
HAT2207C	VX-

■SMFPAK-6

Type No.	Marking
HTT1115S	EK
HTT1213S	CK

■EMFPAK-6

Type No.	Marking
HTT1115E	F
HTT1127E	R
HTT1129E	Z
HTT1132E	B
HTT1213E	E

■SOT-89

Type No.	Marking
CR05AS-8	* * CD (* *: 制造月编码可变 Manufactured date)
CR08AS-12	* * AF (* *: 制造月编码可变 Manufactured date)
BCR08AS-12	* * BF (* *: 制造月编码可变 Manufactured date)

■SC-59

Type No.	Marking
CR05BS-8	3 * * (* *: 制造月编码可变 Manufactured date)

Deleted Type from the List of Previous Versions

Type No.			
2SA1374	2SA1390	2SC3390	2SC3391
2SC3413	2SC3470	2SC3553	2SC3836
2SC5137	2SC5139	2SC5247	2SC5629
2SC5907	2SD1504	2SJ361	2SJ587
2SK439	2SK494	2SK3349	BCR3KM-12L→ BCR3KM-12LA/LB
BCR5KM-12L→ BCR5KM-12LA/LB	BCR5KM-14L→ BCR5KM-14LA/LB	BCR8KM-12L→ BCR8KM-12LA/LB	BCR8KM-14L→ BCR8KM-14LA
BCR8KM-16L→ BCR8KM-16LA	BCR8KM-20L→ BCR8KM-20LA	BCR10KM-12L→ BCR10KM-12LA/LB	BCR12KM-12L→ BCR12KM-12LA/LB
BCR12KM-14L→ BCR12KM-14LA	BCR16KM-12L→ BCR16KM-12LA/LB	FY5ACH-03A	FY5ACJ-03A
FY6ACH-02A	FY7ACH-03A	FY7BCH-02C	FY8ACH-02A
H5N0201MF	H5N0301MF	H5N0301SM	H5N3007LD/LS/LM
H5P0201MF	H5P0301MF	H5P0301SM	H7N1005MD
H7P0603DL/DS	HAT2210R	HAT2210RP	HIN5697
HIT9011			

注) 旧版登載の廢除產品。

瑞萨 晶体管/晶闸管/三端双向可控硅开关 状态表

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