

1、IGBT 产品列表

产品型号 Part No.	BV _{CES} (V)	I _C (A)	V _{GES} (V)	P _{tot} (W)	V _{CE(sat)} (V)		V _{GE(th)} (V)			t _{d(on)} (ns)	t _r (ns)	t _{d(off)} (ns)	t _f (ns)	E _{on} (mJ)	E _{off} (mJ)	封装 Package	可替换产品 Cross Reference
					Typ.	Max.	Min.	Typ.	Max.								
THG05T65NQG	650	5	±20	65	1.5	2.0	4.5	5.6	6.7	13	7	152	49	0.08	0.06	TO-252	
THG10T65NQF	650	10	±20	110	1.8	2.3	4.5	5.6	6.7	15	8	225	43	0.16	0.27	TO-220F	
THG15T65NQF	650	15	±20	107	1.95	2.5	4.8	5.7	6.6	30	24	170	22	0.221	0.586	TO-220F	
THG15T65NQN	650	15	±20	107	1.95	2.5	4.8	5.7	6.6	30	24	170	22	0.221	0.586	TO-263	
THG15T65NQK	650	15	±20	107	1.95	2.5	4.8	5.7	6.6	30	24	170	22	0.221	0.586	TO-247	
THG20T65FQF	650	20	±20	166	1.7	2.2	4.6	5.7	6.8	19	14	199	42	0.31	0.46	TO-220F	
THG20T65NQF	650	20	±20	125	1.95	2.5	4.8	5.7	6.6	30	24	170	22	0.221	0.586	TO-220F	
THG20T65NQN	650	20	±20	125	1.95	2.5	4.8	5.7	6.6	30	24	170	22	0.221	0.586	TO-263	
THG20T65NQK	650	20	±20	125	1.95	2.5	4.8	5.7	6.6	30	24	170	22	0.221	0.586	TO-247	
THG25T65NQF	650	25	±20	178	1.8	2.3	4.5	5.6	6.7	21	18	229	46	0.51	0.65	TO-220F	
THG30T65NQF	650	30	±20	150	1.95	2.5	4.8	5.7	6.6	34	36	198	75	-	-	TO-220F	
THG30T65NQN	650	30	±20	150	1.95	2.5	4.8	5.7	6.6	34	36	198	75	-	-	TO-263	
THG30T65NQK	650	30	±20	150	1.95	2.5	4.8	5.7	6.6	34	36	198	75	-	-	TO-247	
THG40T65NQK	650	40	±20	187	1.9	2.3	4.8	5.7	6.6	42	50	207	53	-	-	TO-247	
THG40T65FQK	650	40	±20	280	1.8	2.3	3.5	5.0	6.5	30	24	170	22	-	-	TO-247	
THG40N65FQKH	650	40	±30	300	2.0	2.4	4.8	-	6.6	104	130	130	97	3.8	0.55	TO-247H	
THG40N65HQKH	650	40	±30	300	2.35	2.8	4.8	-	6.6	88	137	107	83	3.8	0.45	TO-247H	
THG45T65NQK	650	45	±20	258	1.8	2.3	4.5	5.6	6.7	37	24	310	33	1.09	0.57	TO-247	
THG50T65FQK	650	50	±20	300	1.9	2.4	4.0	5.0	6.0	73	158	335	141	2.69	1.29	TO-247	
THG55T65NQK	650	55	±20	325	1.8	2.3	4.5	5.6	6.7	42	30	320	36	1.51	0.85	TO-247	
THG60T65FQK	650	60	±20	383	1.8	2.3	4.5	5.6	6.7	32	45	169	33	1.82	0.88	TO-247	
THG60T65FQKH	650	60	±20	240	1.85	2.4	4.5	5.5	6.5	73	158	335	141	2.69	1.29	TO-247H	

产品型号 Part No.	BV _{CES} (V)	I _C (A)	V _{GES} (V)	P _{tot} (W)	V _{CE(sat)} (V)		V _{GE(th)} (V)			t _{d(on)} (ns)	t _r (ns)	t _{d(off)} (ns)	t _f (ns)	E _{on} (mJ)	E _{off} (mJ)	封装 Package	可替换产品 Cross Reference
					Typ.	Max.	Min.	Typ.	Max.								
THG60T65NQK	650	60	±20	652	2.0	2.3	4.8	5.7	6.6	42	50	218	57	-	-	TO-247	
THG75T65FQK	650	75	±20	438	1.7	2.0	4.5	5.5	6.5	25	21	170	22	-	-	TO-247	
THG75N65FQKH	650	75	±30	652	1.85	2.4	4.8	-	6.6	170	260	186	143	9.0	2.0	TO-247H	
THG80T65FQK	650	80	±20	435	1.8	2.3	4.5	5.6	6.7	48	33	368	32	1.4	1.57	TO-247	
THG160T75FQP	750	160	±20	836	1.8	2.3	4.5	5.6	6.7	45	36	365	41	4.1	2.79	TO-247P	
THG15T120FQK	1200	15	±20	236	2.0	2.5	5.0	6.0	6.9	32	21	213	67	1.03	0.7	TO-247	
THG15N120PKN	1200	15	±20	185	2.1	2.6	4.2	5.2	6.2	55	97	289	212	2.65	1.33	TO-247	
THG15N120RCK	1200	15	±20	200	2.5	3.2	4.0	5.5	6.5	45	52	128	186	1.5	0.9	TO-247	
THG15N120FQKH	1200	15	±30	300	2.3	2.8	4.8	-	6.6	85	109	28	220	3.0	0.4	TO-247H	
THG15N120RF	1200	15	±30	300	2.2	2.6	5.3	-	6.9	82	119	56	209	3.6	0.5	TO-220F	
THG15N120RKH	1200	15	±30	300	2.2	2.6	5.3	-	6.9	82	119	56	209	3.6	0.5	TO-247H	
THG25T120FQK	1200	25	±20	249	2.0	2.5	4.7	5.8	6.8	44	54	243	71	2.4	0.8	TO-247	
THG25N120PKN	1200	25	±20	252	2.1	2.6	4.2	5.2	6.2	68	128	462	224	4.4	2.3	TO-247	
THG25N120RCK	1200	25	±20	265	2.5	3.2	4.0	5.5	6.5	158	36	331	83	1.8	1.4	TO-247	
THG25N120FQKH	1200	25	±30	428	2.3	2.8	4.8	-	6.6	93	179	25	205	3.6	0.8	TO-247H	
THG25N120RKH	1200	25	±30	428	2.2	2.6	5.3	-	6.9	92	185	66	199	5.6	0.9	TO-247H	
THG40T120FQK	1200	40	±20	525	1.95	2.45	4.7	5.8	6.8	77	48	251	57	2.8	1.5	TO-247	
THG40N120PKN	1200	40	±20	330	2.1	2.6	4.2	5.2	6.2	86	287	551	247	8.7	4.1	TO-247	
THG40N120FQKH	1200	40	±30	625	2.3	2.8	4.8	-	6.6	128	233	35	190	5.9	1.4	TO-247H	
THG40N120HQKH	1200	40	±30	625	3.0	3.7	5.2	-	6.8	122	236	94	127	8.4	1.0	TO-247H	
THG45T120FQK	1200	45	±20	597	1.9	2.4	5.0	6.0	6.9	89	52	299	51	3.3	1.68	TO-247	
THG50T120FQK	1200	50	±20	680	1.9	2.4	5.0	6.0	6.9	101	58	349	43	3.8	1.9	TO-247	
THG50N120FQKH	1200	50	±30	750	2.3	2.8	4.8	-	6.6	156	284	40	175	7.2	2.0	TO-247H	
THG50N120FQL	1200	50	±30	750	2.3	2.8	4.8	-	6.6	156	284	40	175	7.2	2.0	TO-264	

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					Typ.	Max.	Min.	Typ.	Max.								
THG60N120PLN	1200	60	±20	520	2.1	2.6	4.2	5.2	6.2	88	217	725	269	12.2	6.2	TO-3PL	
THG75N120NQK	1200	75	±20	657	2.1	2.6	4.8	5.7	6.7	305	67	328	187	6.7	4.3	TO-247P	
THG75N120FQKP	1200	75	±30	789	2.3	2.8	4.8	-	6.6	202	398	42	155	11	3.9	TO-247P	
THG75N120HQKP	1200	75	±30	789	3.0	3.7	4.5	-	6.5	152	35	385	98	12.3	2.7	TO-247P	
THG75N120FQL	1200	75	±30	789	2.3	2.8	4.8	-	6.6	202	398	42	155	11	3.9	TO-264	
THG100N120NQK	1200	100	±20	785	1.9	2.4	5.2	6.2	7.2	279	61	308	205	8.32	8.05	TO-264P	
THG125N120NQK	1200	125	±20	826	1.9	2.4	5.0	6.0	7.0	286	65	321	150	10.3	8.1	TO-264P	
THG150N120NQK	1200	150	±20	968	2.1	2.6	4.8	5.7	6.7	325	68	350	85	11.6	6.8	TO-264P	
THG20N135RKH	1350	20	±30	300	2.3	2.8	5.3	-	6.9	82	119	56	209	3.6	0.5	TO-247H	
THG20N135RB	1350	20	±30	300	2.3	2.8	5.3	-	6.9	82	119	56	209	3.6	0.5	TO-3PN	

2、MOS（低压）产品列表

产品型号 Part No.	极性 Polarity	V _{DSS} (V)	I _D (A)	P _{tot} (W)	V _{GS} (V)	R _{DS(on)} (mΩ)TYP.		V _{th} (V)		封装 Package	可替换产品 Cross Reference
			T _C =25°C			@V _{GS} 10V	@V _{GS} 4.5V	Min.	Max.		
TH2302D	N-Channel	20	2.5	0.55	±10	-	55	0.45	1	SOT-023	
TH2302C	N-Channel	20	2.8	0.65	±10	-	40	0.45	1	SOT-023	
TH2302B	N-Channel	20	3	0.85	±10	-	26	0.45	1	SOT-023	
TH2302A	N-Channel	20	4.5	1.25	±10	-	23	0.45	1	SOT-023	
TH2312C	N-Channel	20	6	1.5	±12	-	13	0.5	1	SOT-023	
TH8205A	Dual N-Channel	20	5	1.5	±12	-	20	0.4	1	SOT-23-6L	
TH60N02TG	N-Channel	20	60	40	±10	-	5	0.45	1	TO-252	
TH120N02TG	N-Channel	20	120	120	±10	-	2.5	0.45	1	TO-252	
TH2304A	N-Channel	30	3.6	0.5	±20	29	44	1	2.2	SOT-023	
TH3400C	N-Channel	30	5	1.2	±12	26	29	0.6	1.3	SOT-023	
TH3404A	N-Channel	30	5.8	1.4	±20	18	25	1	2.5	SOT-023	
TH3400A	N-Channel	30	5.8	1.3	±12	21.5	23	0.6	1.5	SOT-023	
TH50N03TG	N-Channel	30	50	83	±20	4.6	6.2	1	3	TO-252	
TH90N03TG	N-Channel	30	90	120	±20	3.6	5	1	2.5	TO-252	
TH95N03TG	N-Channel	30	95	130	±20	3	5	1.2	2.5	TO-252	
TH100N03TG	N-Channel	30	100	140	±20	2.6	3	1.2	2.5	TO-252	
TH120N03TN	N-Channel	30	120	155	±20	2.5	3	1	3	TO-263	
TH120N03TC	N-Channel	30	120	155	±20	2.5	3	1	3	TO-220C	
TH120N03GA	N-Channel	30	120	155	±20	1.25	1.65	1	2	PDFN5060	
TH170N03TN	N-Channel	30	170	160	±20	1.5	2.3	1	2.4	TO-263	
TH170N03TC	N-Channel	30	170	160	±20	1.5	2.3	1	2.4	TO-220C	
TH40N04GA	N-Channel	40	40	65	±20	6.5	10	1	2.5	PDFN5060	

产品型号 Part No.	极性 Polarity	V _{DSS} (V)	I _D (A)	P _{tot} (W)	V _{GS} (V)	R _{DS(on)} (mΩ)TYP.		V _{th} (V)		封装 Package	可替换产品 Cross Reference
			T _C =25°C			@V _{GS} 10V	@V _{GS} 4.5V	Min.	Max.		
TH140N04GA	N-Channel	40	140	120	±20	1.65	2.45	1.2	2.4	PDFN5060	
TH160N04GAP	N-Channel	40	160	150	±20	1.4	2.25	1.2	2.4	PDFN5060-Clip	
TH225N04GA	N-Channel	40	225	184	±20	1.1	1.7	1.2	2.5	PDFN5060	
TH200N04GAH	N-Channel	40	200	174	±20	1.2	-	2.2	2.8	PDFN5060	
TH275N04GAP	N-Channel	40	275	204	±20	0.85	1.4	1.2	2.5	PDFN5060-Clip	
TH240N04GAHP	N-Channel	40	240	194	±20	0.95	-	2	3.5	PDFN5060-Clip	
TH320N04GL	N-Channel	40	320	225	±20	0.85	-	2	3	TOLL	
TH320N04GAPS	N-Channel	40	320	225	±20	0.61	-	2	3	PDFN5060-Clip 双面散热	
TH320N04GAP	N-Channel	40	320	225	±20	0.78	-	2	3	PDFN5060-Clip	
IRFZ44C	N-Channel	55	49	94	±20	17.5	-	2	4	TO-220C	
IRF3205	N-Channel	55	110	75	±20	6.2	-	2	4	TO-220C	
2N7002	N-Channel	60	0.3	0.23	±20	1600	2000	1	2.5	SOT-023	
TH2310	N-Channel	60	3	3.1	±20	73	85	1	2.2	SOT-023	
TH15N06TG	N-Channel	60	15	47	±20	28	35	1	2.5	TO-252	
TH50N06GB	N-Channel	60	50	75	±20	10	13	1	2.5	PDFN3.3X3.3	
TH50N06TG	N-Channel	60	50	100	±20	11	12.5	1	2.5	TO-252	
TH50N06TE	N-Channel	60	50	100	±20	11	12.5	1	2.5	TO-220EW	
TH88N06TC	N-Channel	60	88	125	±20	6.5	8	2	4	TO-220C	
TH100N06TC	N-Channel	60	100	130	±20	5.2	-	2	4	TO-220C	
TH125N06GA	N-Channel	60	125	140	±20	1.85	2.25	1.2	2.5	PDFN5060	
TH125N06GHA	N-Channel	60	125	140	±20	1.95	-	2	4	PDFN5060	
TH140N06GC	N-Channel	60	140	140	±20	4.2	-	1	3	TO-220C	
TH160N06GC	N-Channel	60	160	200	±20	3.5	-	2	4	TO-220C	

产品型号 Part No.	极性 Polarity	V_{DSS} (V)	I_D (A)	P_{tot} (W)	V_{GS} (V)	$R_{DS(on)}$ (m Ω)TYP.		V_{th} (V)		封装 Package	可替换产品 Cross Reference
			$T_C=25^{\circ}C$			@ $V_{GS}10V$	@ $V_{GS}4.5V$	Min.	Max.		
TH210N06GC	N-Channel	60	210	255	± 20	1.7	-	2	4	TO-220C	
TH275N06GHAP	N-Channel	60	275	275	± 20	1	-	2.2	3.8	PDFN5060-Clip	
TH275N06GHAL	N-Channel	60	275	275	± 20	1	-	2.2	3.8	TOLL	
TH275N06GBP	N-Channel	60	275	275	± 20	0.85	-	1.2	2.5	PDFN5060-Clip	
TH320N06GC	N-Channel	60	320	300	± 20	1.1	-	2	4	TO-220C	
TH50N06PW	N-Channel	60	50	80	± 20	16	-	2	4	TO-220W	
TH95N08TC	N-Channel	80	95	170	± 20	7.5	-	2	4	TO-220C	
TH120N08TC	N-Channel	80	120	200	± 20	4.3	-	2	4	TO-220C	
TH120N08GC	N-Channel	85	120	150	± 20	4.45	-	2	4	TO-220C	
TH140N08GC	N-Channel	85	140	200	± 20	3.5	-	2	4	TO-220C	
TH190N08GC	N-Channel	85	190	240	± 20	3	-	2	4	TO-220C	
TH300N08GC	N-Channel	85	300	340	± 20	1.8	-	2	4	TO-220C	
TH2N10G	N-Channel	100	2	1.25	± 20	235	245	1	2.1	SOT-23	
TH4N10G	N-Channel	100	3.3	2	± 20	95	135	1	2.5	SOT-23	
TH8N10G	N-Channel	100	8	2.5	± 20	67	85	1	2.4	SOT-23	
TH12N10GG	N-Channel	100	12	3.5	± 20	88	96	1	2.5	SOT-23	
TH60N10GHA	N-Channel	100	60	80	± 20	10.2	-	2	4	PDFN5060	
TH75N10GHA	N-Channel	100	75	120	± 20	6.4	-	2	4	PDFN5060	
TH100N10GC	N-Channel	100	100	140	± 20	5.7	-	2	4	TO-220C	
TH125N10GC	N-Channel	100	125	200	± 20	4.2	-	2	4	TO-220C	
TH125N10GC	N-Channel	100	125	200	± 20	4.2	-	1.2	2.4	TO-220C	
TH150N10GHA	N-Channel	100	150	240	± 20	3.4	-	2	4	PDFN5060	
TH160N10GC	N-Channel	100	160	245	± 20	2.9	-	2	4	TO-220C	
TH175N10GC	N-Channel	100	175	275	± 20	2.6	-	2	4	TO-220C	

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			T _C =25°C			@V _{GS} 10V	@V _{GS} 4.5V	Min.	Max.		
TH250N10GN	N-Channel	100	250	340	±20	2	-	2.7	4.3	TO-263	
TH300N10GC	N-Channel	100	300	380	±20	1.7	-	2.7	4.3	TO-220C	

3、MOS（高压）产品列表

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			T _C =25°C			@V _{GS} 10V	@V _{GS} 4.5V	Min.	Max.		
IRFP250M	N-Channel	200	30	178	±30	0.06	-	2	4	TO-247H	
TH31N20PC	N-Channel	200	31	192	±30	0.08	-	2	4	TO-220C	
TH40N20PC	N-Channel	200	40	255	±30	0.05	-	2	4	TO-220C	
IRFP260M	N-Channel	200	50	240	±30	0.03	-	2	4	TO-247H	
TH52N20PC	N-Channel	200	52	260	±30	0.03	-	2	4	TO-220C	
TH52N20PF	N-Channel	200	52	38	±30	0.03	-	2	4	TO-220F	
TH52N20PN	N-Channel	200	52	260	±30	0.03	-	2	4	TO-263	
TH70N20PKH	N-Channel	200	70	463	±30	0.03	-	2	4	TO-247H	
TH90N20PK	N-Channel	200	90	568	±30	0.02	-	2	4	TO-247	
TH90N20PKH	N-Channel	200	90	568	±30	0.02	-	2	4	TO-247H	
TH130N20PKH	N-Channel	200	130	833	±30	0.02	-	2	4	TO-247H	
TH33N25PC	N-Channel	250	33	223	±30	0.07	-	2	4	TO-220C	
TH44N25PK	N-Channel	250	44	313	±30	0.06	-	2	4	TO-247	
TH59N25PU	N-Channel	250	59	417	±30	0.04	-	2	4	TO-3P	
TH69N25PU	N-Channel	250	69	417	±30	0.03	-	2	4	TO-3P	
TH105N25PKH	N-Channel	250	105	833	±30	0.02	-	2	4	TO-247H	
TH38N30PU	N-Channel	300	38	329	±30	0.08	-	2	4	TO-3P	
TH52N30PU	N-Channel	300	52	543	±30	0.06	-	2	4	TO-3P	
TH59N30PU	N-Channel	300	59	480	±30	0.05	-	2	4	TO-3P	
TH90N30PU	N-Channel	300	90	735	±30	0.03	-	2	4	TO-3P	
TH90N30PKH	N-Channel	300	90	735	±30	0.03	-	2	4	TO-247H	
TH6N40PM	N-Channel	400	6	50	±30	0.77	1	2	4	TO-220M	
TH10N40PM	N-Channel	400	10	80	±30	0.36	0.5	2	4	TO-220M	

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			$T_C=25^\circ\text{C}$			@ $V_{GS}10\text{V}$	@ $V_{GS}4.5\text{V}$	Min.	Max.		
TH19N40PK	N-Channel	400	19	180	± 30	0.18	0.24	2	4	TO-247	
TH24N40PK	N-Channel	400	24	250	± 30	0.14	0.18	2	4	TO-247	
TH5N50PM	N-Channel	500	5	50	± 30	1.25	1.5	2	4	TO-220M	
TH830TG	N-Channel	500	5	40	± 30	1.25	-	2	4	TO-252	
TH5N50PC	N-Channel	500	5	40	± 30	1.25	-	2	4	TO-220C	
TH7N50PM	N-Channel	500	7	70	± 30	0.68	0.9	2	4	TO-220M	
TH8N50PM	N-Channel	500	8	80	± 30	0.57	0.75	2	4	TO-220M	
TH840TG	N-Channel	500	8	75	± 30	0.70	-	2	4	TO-252	
TH8N50PC	N-Channel	500	8	75	± 30	0.70	-	2	4	TO-220C	
TH12N50PM	N-Channel	500	12	100	± 30	0.4	0.5	2	4	TO-220M	
TH15N50PM	N-Channel	500	13	120	± 30	0.34	0.45	2	4	TO-220M	
TH15N50PB	N-Channel	500	13	150	± 30	0.34	0.45	2	4	TO-3PN	
TH15N50PC	N-Channel	500	15	236	± 30	0.34	-	2	4	TO-220C	
2SK2698	N-Channel	500	15	170	± 30	0.28	-	2	4	TO-3PS	
2SK4107	N-Channel	500	15	170	± 30	0.28	-	2	4	TO-3PS	
TH18N50PB	N-Channel	500	18	212	± 30	0.25	-	2	4	TO-3PN	
TH20N50PB	N-Channel	500	20	270	± 30	0.24	-	2	4	TO-3PN	
TH20N50PK	N-Channel	500	20	270	± 30	0.24	-	2	4	TO-247	
2SK2837	N-Channel	500	20	255	± 30	0.20	-	2	4	TO-3PS	
2SK4108	N-Channel	500	20	255	± 30	0.20	-	2	4	TO-3PS	
IRFP460M	N-Channel	500	20	227	± 30	0.16	-	2	4	TO-247H	
TH22N50PB	N-Channel	500	22	270	± 30	0.21	0.26	2	4	TO-3PN	
TH22N50PK	N-Channel	500	22	270	± 30	0.21	0.26	2	4	TO-247	
2SK3907	N-Channel	500	23	278	± 30	0.15	-	2	4	TO-3PS	
TH23N50PB	N-Channel	500	23	305	± 30	0.19	-	2	4	TO-3PN	

产品型号 Part No.	极性 Polarity	V_{DSS} (V)	I_D (A)	P_{tot} (W)	V_{GS} (V)	$R_{DS(on)}$ (Ω) TYP.		V_{th} (V)		封装 Package	可替换产品 Cross Reference
			$T_C=25^\circ\text{C}$			@ $V_{GS}10\text{V}$	@ $V_{GS}4.5\text{V}$	Min.	Max.		
TH23N50PK	N-Channel	500	23	305	± 30	0.19	-	2	4	TO-247	
TH24N50PB	N-Channel	500	24	300	± 30	0.17	0.2	2	4	TO-3PN	
TH25N50PB	N-Channel	500	25	368	± 30	0.18	-	2	4	TO-3PN	
TH28N50PU	N-Channel	500	28	313	± 30	0.13	-	2	4	TO-3P	
TH28N50PB	N-Channel	500	28	313	± 30	0.13	-	2	4	TO-3PN	
TH30N50PB	N-Channel	500	30	360	± 30	0.16	0.2	2	4	TO-3PN	
TH30N50PU	N-Channel	500	30	357	± 30	0.13	-	2	4	TO-3P	
TH40N50PK	N-Channel	500	40	370	± 30	0.09	0.12	2	4	TO-247	
TH40N50PL	N-Channel	500	40	370	± 30	0.09	0.12	2	4	TO-3PL	
TH40N50PB	N-Channel	500	40	568	± 30	0.12	-	2	4	TO-3PN	
2SK3132	N-Channel	500	50	250	± 30	0.07	-	2	4	TO-3PL	
TH60N50PU	N-Channel	500	60	833	± 30	0.07	-	2	4	TO-3P	
TH2N60PF	N-Channel	600	2	30	± 30	3.4	4.5	2	4	TO-220F	
TH4N60PF	N-Channel	600	4	35	± 30	1.8	2.3	2	4	TO-220F	
TH5N60PF	N-Channel	600	5	45	± 30	1.4	1.7	2	4	TO-220F	
TH6N60PF	N-Channel	600	6	60	± 30	1	1.3	2	4	TO-220F	
TH7N60PF	N-Channel	600	7	75	± 30	0.88	1.25	2	4	TO-220F	
TH8N60PF	N-Channel	600	8	80	± 30	0.8	1.2	2	4	TO-220F	
TH10N60PF	N-Channel	600	10	120	± 30	0.6	0.75	2	4	TO-220F	
TH12N60PF	N-Channel	600	12	140	± 30	0.49	0.65	2	4	TO-220F	
TH16N60PB	N-Channel	600	16	180	± 30	0.41	0.5	2	4	TO-3PN	
TH16N60PF	N-Channel	600	16	150	± 30	0.41	0.5	2	4	TO-220F	
TH20N60PB	N-Channel	600	20	250	± 30	0.36	0.45	2	4	TO-3PN	
TH20N60PF	N-Channel	600	20	250	± 30	0.36	0.45	2	4	TO-220F	
TH24N60PB	N-Channel	600	24	300	± 30	0.36	0.45	2	4	TO-3PN	

产品型号 Part No.	极性 Polarity	V_{DSS} (V)	I_D (A)	P_{tot} (W)	V_{GS} (V)	$R_{DS(on)}$ (Ω) TYP.		V_{th} (V)		封装 Package	可替换产品 Cross Reference
			$T_C=25^\circ\text{C}$			@ $V_{GS}10\text{V}$	@ $V_{GS}4.5\text{V}$	Min.	Max.		
TH40N60PB	N-Channel	600	40	350	± 30	0.09	0.12	2.5	4.5	TO-3PN	
TH40N60PK	N-Channel	600	40	350	± 30	0.09	0.12	2.5	4.5	TO-247	
TH50N60PB	N-Channel	600	50	380	± 30	0.09	0.12	2.5	4.5	TO-3PN	
TH2N65PF	N-Channel	650	2	35	± 30	3.9	5	2	4	TO-220F	
TH4N65PG	N-Channel	650	4	75	± 30	2.00	-	2	4	TO-252	
TH4N65PC	N-Channel	650	4	75	± 30	2.00	-	2	4	TO-220C	
TH4N65PF	N-Channel	650	4	75	± 30	2.00	-	2	4	TO-220F	
TH4N65PN	N-Channel	650	4	75	± 30	2.00	-	2	4	TO-263	
TH5N65PF	N-Channel	650	5	55	± 30	1.7	2	2	4	TO-220F	
TH6N65PF	N-Channel	650	6	80	± 30	1.3	1.5	2	4	TO-220F	
TH7N65PC	N-Channel	650	7	50	± 30	1.20	-	2	4	TO-220C	
TH7N65PF	N-Channel	650	7	50	± 30	1.20	-	2	4	TO-220F	
TH8N65PF	N-Channel	650	8	100	± 30	0.95	1.2	2	4	TO-220F	
TH10N65PC	N-Channel	650	10	70	± 30	0.80	-	2	4	TO-220C	
TH10N65PF	N-Channel	650	10	70	± 30	0.80	-	2	4	TO-220F	
TH12N65PC	N-Channel	650	12	75	± 30	0.46	-	2	4	TO-220C	
TH12N65PF	N-Channel	650	12	75	± 30	0.46	-	2	4	TO-220F	
TH13N65PF	N-Channel	650	13	130	± 30	0.5	0.7	2	4	TO-220F	
TH15N65PF	N-Channel	650	15	150	± 30	0.5	0.7	2	4	TO-220F	
TH16N65PB	N-Channel	650	16	180	± 30	0.4	0.55	2	4	TO-3PN	
TH16N65PF	N-Channel	650	16	180	± 30	0.4	0.55	2	4	TO-220F	
TH20N65PK	N-Channel	650	20	250	± 30	0.37	0.5	2	4	TO-247	
TH20N65PC	N-Channel	650	20	250	± 30	0.37	-	2	4	TO-220C	
TH20N65PF	N-Channel	650	20	250	± 30	0.37	-	2	4	TO-220F	
TH20N65PB	N-Channel	650	20	250	± 30	0.37	-	2	4	TO-3PN	

产品型号 Part No.	极性 Polarity	V_{DSS} (V)	I_D (A)	P_{tot} (W)	V_{GS} (V)	$R_{DS(on)}$ (Ω) TYP.		V_{th} (V)		封装 Package	可替换产品 Cross Reference
			$T_C=25^\circ\text{C}$			@ $V_{GS}10\text{V}$	@ $V_{GS}4.5\text{V}$	Min.	Max.		
TH40N65PB	N-Channel	650	30	962	± 30	0.21	-	2	4	TO-3PN	
TH6N70PF	N-Channel	700	6	75	± 30	1.5	1.6	2	4	TO-220F	
TH10N70PF	N-Channel	700	10	140	± 30	0.78	0.9	2	4	TO-220F	
TH12N70PB	N-Channel	700	12	140	± 30	0.64	0.75	2	4	TO-3PN	
TH3N80PG	N-Channel	800	3	104	± 30	3.80	-	2	4	TO-252	
TH6N80PB	N-Channel	800	6	80	± 30	1.65	2.2	2	4	TO-3PN	
TH6N80PF	N-Channel	800	6	50	± 30	1.65	2.2	2	4	TO-220F	
TH7N80PB	N-Channel	800	7	100	± 30	1.5	1.8	2	4	TO-3PN	
TH7N80PF	N-Channel	800	7	57	± 30	1.40	-	2	4	TO-220F	
TH8N80PB	N-Channel	800	8	100	± 30	0.95	1.25	2	4	TO-3PN	
TH8N80PF	N-Channel	800	8	70	± 30	0.95	1.25	2	4	TO-220F	
TH10N80PB	N-Channel	800	10	150	± 30	0.72	0.9	2	4	TO-3PN	
TH10N80PF	N-Channel	800	10	80	± 30	0.72	0.9	2	4	TO-220F	
TH12N80PC	N-Channel	800	10	180	± 30	0.72	0.9	2	4	TO-220C	
TH12N80PF	N-Channel	800	10	100	± 30	0.72	0.9	2	4	TO-220F	
TH3N90PF	N-Channel	900	3	50	± 30	4.7	5.5	2	4	TO-220F	
TH4N90PB	N-Channel	900	4	80	± 30	1.5	2	2.5	4.5	TO-3PN	
TH4N90PF	N-Channel	900	4	70	± 30	1.5	2	2.5	4.5	TO-220F	
TH5N90PF	N-Channel	900	5	100	± 30	1.8	2.3	2	4	TO-220F	
TH6N90PB	N-Channel	900	6	150	± 30	1.5	1.9	2	4	TO-3PN	
TH8N90PB	N-Channel	900	8	200	± 30	1.3	1.5	2	4	TO-3PN	
TH9N90PF	N-Channel	900	9	250	± 30	1.05	1.3	3	5	TO-220F	
TH11N90PB	N-Channel	900	11	250	± 30	0.82	1.1	3	5	TO-3PN	
TH12N90PB	N-Channel	900	12	260	± 30	0.82	1.1	3	5	TO-3PN	
TH16N90PL	N-Channel	900	16	300	± 30	0.58	0.78	2	5	TO-3PL	

产品型号 Part No.	极性 Polarity	V_{DSS} (V)	I_D (A)	P_{tot} (W)	V_{GS} (V)	$R_{DS(on)}$ (Ω) TYP.		V_{th} (V)		封装 Package	可替换产品 Cross Reference
			$T_C=25^\circ\text{C}$			@ $V_{GS}10\text{V}$	@ $V_{GS}4.5\text{V}$	Min.	Max.		
TH20N90PL	N-Channel	900	20	320	± 30	0.35	0.5	2	4	TO-3PL	
TH24N90PL	N-Channel	900	24	350	± 30	0.35	0.45	2	4	TO-3PL	
TH24N90PB	N-Channel	900	24	350	± 30	0.35	0.45	2	4	TO-3PN	
TH30N90PL	N-Channel	900	30	400	± 30	0.28	0.35	3	4	TO-3PL	
TH30N90PB	N-Channel	900	30	400	± 30	0.28	0.35	3	4	TO-3PN	
TH30N90PK	N-Channel	900	30	400	± 30	0.28	0.35	3	4	TO-247	
TH5N100PF	N-Channel	1000	5	85	± 30	2.50	-	2	4	TO-220F	
TH6N100PH	N-Channel	1000	6	350	± 30	2.5	3	3	5	TO-3PH	
TH3N120PC	N-Channel	1200	3	120	± 30	5.1	6	3	5	TO-220C	
TH3N120PE	N-Channel	1200	3	120	± 30	5.1	6	3	5	TO-220EW	
TH3N120PF	N-Channel	1200	3	120	± 30	5.1	6	3	5	TO-220F	
TH3N120PG	N-Channel	1200	3	120	± 30	5.1	6	3	5	TO-252	
TH3N120PH	N-Channel	1200	3	120	± 30	5.1	6	3	5	TO-3PH	
TH3N120PN	N-Channel	1200	3	120	± 30	5.1	6	3	5	TO-263	
TH4N120PF	N-Channel	1200	4	90	± 30	3.20	-	2	4	TO-220F	
TH5N120PH	N-Channel	1200	5	150	± 30	2.6	3.2	3	5	TO-3PH	
TH3N150PH	N-Channel	1500	3	186	± 30	5.70	-	2	4	TO-3PH	
TH3N150PN	N-Channel	1500	3	186	± 30	5.70	-	2	4	TO-263	

4、双极型晶体管（音频）产品列表

产品型号 Part No.	极性 Polarity	BV _{CBO} (V)	BV _{CEO} (V)	I _C (A)	P _C (W)	HFE				V _{CE} (sat)(V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I _C (A)	V _{CE} (V)	Max.	I _C (A)	I _B (A)		
2SA940A	PNP	-150	-150	-1.5	25	40	140	0.5	10	-1.5	-0.5	-0.05	TO-220F	
2SC2073A	NPN	150	150	1.5	25	40	140	0.5	10	1.5	0.5	0.05	TO-220F	
2SA1220A	PNP	-160	-160	-1.2	20	60	320	0.3	4	-0.7	-1	-0.2	TO-126	
2SC2690A	NPN	160	160	1.2	20	60	320	0.3	4	0.7	1	0.2	TO-126	
2SA1358	PNP	-120	-120	-1	10	80	240	0.1	4	-1	-0.5	-0.05	TO-126	
2SC3421	NPN	120	120	1	10	80	240	0.1	4	1	0.5	0.05	TO-126	
2SA1360	PNP	-150	-150	-0.05	5	80	240	0.1	4	-1	-0.5	-0.05	TO-126	
2SC3423	NPN	150	150	0.05	5	80	240	0.1	4	1	0.5	0.05	TO-126	
2SA1668	PNP	-200	-200	-2	25	60	-	0.7	10	-1	-1	-0.1	TO-220F	
2SC4382	NPN	200	200	2	25	60	-	0.7	10	1	1	0.1	TO-220F	
2SA1837	PNP	-230	-230	-1	20	100	320	0.1	5	-1.5	-0.5	-0.05	TO-220F	
2SC4793	NPN	230	230	1	20	100	320	0.1	5	1.5	0.5	0.05	TO-220F	
2SA1859A	PNP	-180	-180	-2	20	60	240	0.7	10	-1	-1	-0.1	TO-220F	
2SC4883A	NPN	180	180	2	20	60	240	0.7	10	1	1	0.1	TO-220F	
2SA1930	PNP	-180	-180	-2	20	100	320	0.1	5	-1	-1	-0.1	TO-220F	
2SC5171	NPN	180	180	2	20	100	320	0.1	5	1	1	0.1	TO-220F	
2SA1964	PNP	-180	-160	-1.5	20	60	200	0.1	5	-1	-1	-0.1	TO-220F	
2SC5248	NPN	180	160	1.5	20	60	200	0.1	5	1	1	0.1	TO-220F	
2SB1683	PNP	-160	-140	-12	80	60	200	1	4	-1.5	-5	-0.5	TO-220W	
2SD2693	NPN	160	140	12	80	60	200	1	4	1.5	5	0.5	TO-220W	
KSA940	PNP	-150	-150	-1.5	25	40	140	0.5	10	1.5	-0.5	-0.05	TO-220W	
KSC2073	NPN	150	150	1.5	25	40	140	0.5	10	1.5	0.5	0.05	TO-220W	
KTA1700	PNP	-150	-150	-1.5	15	80	240	0.1	4	-1	-0.5	-0.05	TO-126	

产品型号 Part No.	极性 Polarity	BV_{CBO} (V)	BV_{CEO} (V)	I_C (A)	P_C (W)	HFE				$V_{CE(sat)}$ (V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I_C (A)	V_{CE} (V)	Max.	I_C (A)	I_B (A)		
KTC2800	NPN	150	150	1.5	15	80	240	0.1	4	1	0.5	0.05	TO-126	
KTB631	PNP	-120	-120	-1	10	80	240	0.1	4	-1	0.5	0.05	TO-126	
KTD600	NPN	120	120	1	10	80	240	0.1	4	1	0.5	0.05	TO-126	
MJD32C	PNP	-100	-100	-3	15	30	-	1	4	-1.2	-3	-0.38	TO-252	
MJD31C	NPN	100	100	3	15	30	-	1	4	1.2	3	0.375	TO-252	
MJD42C	PNP	-100	-100	-6	30	15	75	3	4	-1.5	-6	-0.6	TO-252	
MJD41C	NPN	100	100	6	30	15	75	3	4	1.5	6	0.6	TO-252	
MJD45H11	PNP	-80	-100	-8	30	40	-	4	1	-1	-8	-0.4	TO-252	
MJD44H11	NPN	80	100	8	30	40	-	4	1	1	8	0.4	TO-252	
MJD253	PNP	-100	-100	-4	15	40	180	0.5	4	-0.3	-0.5	-0.05	TO-252	
MJD243	NPN	100	100	4	15	40	180	0.5	4	0.3	0.5	0.05	TO-252	
MJD350	PNP	-300	-300	-0.5	15	30	240	0.05	10	-1.5	-0.3	-0.03	TO-252	
MJD340	NPN	300	300	0.5	15	30	240	0.05	10	1.5	0.3	0.03	TO-252	
MJD2955	PNP	-60	-70	-10	30	30	-	4	4	-1.1	-4	-0.4	TO-252	
MJD3055	NPN	60	70	10	30	30	-	4	4	1.1	4	0.4	TO-252	
MJE45H11	PNP	-80	-100	-10	65	40	-	4	1	-1	-8	-0.4	TO-220W	
MJE44H11	NPN	80	100	10	65	40	-	4	1	1	8	0.4	TO-220W	
MJE172	PNP	-100	-80	-3	12.5	50	250	0.1	4	-0.3	-0.5	-0.05	TO-126	
MJE182	NPN	100	80	3	12.5	50	250	0.1	4	0.3	0.5	0.05	TO-126	
MJE253	PNP	-100	-100	-4	15	40	180	0.5	4	-0.3	-0.5	-0.05	TO-126	
MJE243	NPN	100	100	4	15	40	180	0.5	4	0.3	0.5	0.05	TO-126	
MJE350	PNP	-300	-300	-0.5	15	30	240	0.05	10	-1.5	-0.3	-0.03	TO-126	
MJE340	NPN	300	300	0.5	15	30	240	0.05	10	1.5	0.3	0.03	TO-126	
MJE2955	PNP	-60	-70	-10	65	30	-	4	4	-1.1	-4	-0.4	TO-220W	
MJE3055	NPN	60	70	10	65	30	-	4	4	1.1	4	0.4	TO-220W	

产品型号 Part No.	极性 Polarity	BV_{CBO} (V)	BV_{CEO} (V)	I_C (A)	P_C (W)	HFE				$V_{CE(sat)}$ (V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I_C (A)	V_{CE} (V)	Max.	I_C (A)	I_B (A)		
MJE15029	PNP	-120	-120	-8	50	40	-	2	4	-0.5	-1	-0.1	TO-220W	
MJE15028	NPN	120	120	8	50	40	-	2	4	0.5	1	0.1	TO-220W	
MJE15031	PNP	-150	-150	-8	50	40	-	2	4	-0.5	-1	-0.1	TO-220W	
MJE15030	NPN	150	150	8	50	40	-	2	4	0.5	1	0.1	TO-220W	
MJE15033	PNP	-250	-250	-8	50	70	-	0.5	5	-0.5	-1	-0.1	TO-220W	
MJE15032	NPN	250	250	8	50	70	-	0.5	5	0.5	1	0.1	TO-220W	
MJE15035	PNP	-300	-300	-4	50	100	-	0.1	5	-0.5	-1	-0.1	TO-220W	
MJE15034	NPN	300	300	4	50	100	-	0.1	5	0.5	1	0.1	TO-220W	
MJF45H11	PNP	-100	-80	-8	65	30	-	4	4	-1	-8	-0.4	TO-220F	
MJF44H11	NPN	100	80	8	65	30	-	4	4	1	8	0.4	TO-220F	
MJF2955	PNP	-60	-70	-10	65	30	-	4	4	-1.1	-4	-0.4	TO-220F	
MJF3055	NPN	60	70	10	65	30	-	4	4	1.1	4	0.4	TO-220F	
MJF15031	PNP	-150	-150	-8	50	40	-	2	4	-0.5	-1	-0.1	TO-220F	
MJF15030	NPN	150	150	8	50	40	-	2	4	0.5	1	0.1	TO-220F	
TIP32C	PNP	-100	-100	-3	30	30	-	1	4	-1.2	-3	-0.38	TO-220W	
TIP31C	NPN	100	100	3	30	30	-	1	4	1.2	3	0.375	TO-220W	
TIP42C	PNP	-100	-100	-6	65	30	-	0.3	4	-1.5	-6	-0.6	TO-220W	
TIP41C	NPN	100	100	6	65	30	-	0.3	4	1.5	6	0.6	TO-220W	
MJ2955	PNP	-60	-100	-15	115	20	70	4	4	-1.1	-4	-0.4	TO-3	
2N3055	NPN	60	100	15	115	10	-	10	4	1.1	4	0.4	TO-3	
2N6609	PNP	-140	-160	-16	150	15	60	8	4	-1.4	-8	-0.8	TO-3	
2N3773	NPN	140	160	16	150	5	-	16	4	1.4	8	0.8	TO-3	
2SA1186	PNP	-150	-150	-10	100	55	160	1	5	-2	-5	-0.5	TO-3PN	
2SC2837	NPN	150	150	10	100	50	-	3	4	2	5	0.5	TO-3PN	
2SA1215	PNP	-160	-160	-15	150	55	160	1	5	-2	-5	-0.5	MT-200	

产品型号 Part No.	极性 Polarity	BV_{CBO} (V)	BV_{CEO} (V)	I_C (A)	P_C (W)	HFE				$V_{CE(sat)}$ (V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I_C (A)	V_{CE} (V)	Max.	I_C (A)	I_B (A)		
2SC2921	NPN	160	160	15	150	50	-	5	4	2	5	0.5	MT-200	
2SA1216	PNP	-180	-180	-17	200	55	160	1	5	-2	-8	-0.8	MT-200	
2SC2922	NPN	180	180	17	200	30	-	8	4	2	8	0.8	MT-200	
2SA1294	PNP	-230	-230	-15	130	55	160	1	5	-2	-5	-0.5	TO-3PN	
2SC3263	NPN	230	230	15	130	50	-	5	4	2	5	0.5	TO-3PN	
2SA1295	PNP	-230	-230	-17	200	55	160	1	5	-2	-5	-0.5	MT-200	
2SC3264	NPN	230	230	17	200	50	-	5	4	2	5	0.5	MT-200	
2SA1303	PNP	-150	-150	-14	125	55	160	1	5	-2	-5	-0.5	TO-3PN	
2SC3284	NPN	150	150	14	125	50	-	5	4	2	5	0.5	TO-3PN	
2SA1386A	PNP	-180	-180	-15	130	55	160	1	5	-2	-5	-0.5	TO-3PN	
2SC3519A	NPN	180	180	15	130	50	-	5	4	2	5	0.5	TO-3PN	
2SA1492	PNP	-180	-180	-15	130	55	160	1	5	-2	-5	-0.5	TO-3PN	
2SC3856	NPN	180	180	15	130	50	-	3	4	2	5	0.5	TO-3PN	
2SA1493	PNP	-200	-200	-15	150	55	160	1	5	-3	-10	-1	MT-200	
2SC3857	NPN	200	200	15	150	50	-	5	4	3	10	1	MT-200	
2SA1494	PNP	-200	-200	-17	200	55	160	1	5	-2.5	-10	-1	MT-200	
2SC3858	NPN	200	200	17	200	50	-	5	4	2.5	10	1	MT-200	
2SA1693	PNP	-80	-80	-6	60	55	160	1	5	-1.5	-2	-0.2	TO-3PN	
2SC4466	NPN	80	80	6	60	50	-	2	4	1.5	2	0.2	TO-3PN	
2SA1694	PNP	-120	-120	-8	80	55	160	1	5	-1.5	-3	-0.3	TO-3PN	
2SC4467	NPN	120	120	8	80	50	-	3	4	1.5	3	0.3	TO-3PN	
2SA1695	PNP	-140	-140	-10	100	55	160	1	5	-0.5	-5	-0.5	TO-3PN	
2SC4468	NPN	140	140	10	100	50	-	3	4	0.5	5	0.5	TO-3PN	
2SA1803	PNP	-80	-80	-6	55	55	160	1	5	-2	-5	-0.5	TO-3PF	
2SC4688	NPN	80	80	6	55	35	-	3	5	2	5	0.5	TO-3PF	

产品型号 Part No.	极性 Polarity	BV _{CBO} (V)	BV _{CEO} (V)	I _C (A)	P _C (W)	HFE				V _{CE} (sat)(V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I _C (A)	V _{CE} (V)	Max.	I _C (A)	I _B (A)		
2SA1804	PNP	-120	-120	-8	70	55	160	1	5	-2	-6	-0.6	TO-3PF	
2SC4689	NPN	120	120	8	70	35	-	4	5	2	6	0.6	TO-3PF	
2SA1805	PNP	-140	-140	-10	80	55	160	1	5	-2	-7	-0.7	TO-3PF	
2SC4690	NPN	140	140	10	80	35	-	5	5	2	7	0.7	TO-3PF	
2SA1907	PNP	-80	-80	-6	60	55	160	1	5	-0.5	-2	-0.2	TO-3PF	
2SC5099	NPN	80	80	6	60	50	-	2	4	0.5	2	0.2	TO-3PF	
2SA1908	PNP	-120	-120	-8	75	55	160	1	5	-0.5	-3	-0.3	TO-3PF	
2SC5100	NPN	120	120	8	75	50	-	3	4	0.5	3	0.3	TO-3PF	
2SA1909	PNP	-140	-140	-10	80	55	160	1	5	-0.5	-5	-0.5	TO-3PF	
2SC5101	NPN	140	140	10	80	50	-	3	5	0.5	5	0.5	TO-3PF	
2SA1939	PNP	-80	-80	-6	60	55	160	1	5	-2	-5	-0.5	TO-3PS	
2SC5196	NPN	80	80	6	60	35	-	3	5	2	5	0.5	TO-3PS	
2SA1940	PNP	-120	-120	-8	80	55	160	1	5	-2	-6	-0.6	TO-3PS	
2SC5197	NPN	120	120	8	80	35	-	4	5	2	6	0.6	TO-3PS	
2SA1941	PNP	-140	-140	-10	100	55	160	1	5	-2	-7	-0.7	TO-3PS	
2SC5198	NPN	140	140	10	100	35	-	5	5	2	7	0.7	TO-3PS	
2SA1942	PNP	-160	-160	-12	120	55	160	1	5	-2.5	-8	-0.8	TO-3PL	
2SC5199	NPN	160	160	12	120	35	-	6	5	2.5	8	0.8	TO-3PL	
2SA1943	PNP	-230	-230	-15	165	55	160	1	5	-3	-8	-0.8	TO-3PL	
2SC5200	NPN	230	230	15	165	35	-	7	5	3	8	0.8	TO-3PL	
2SA1962	PNP	-230	-230	-15	130	55	160	1	5	-3	-8	-0.8	TO-3PS	
2SC5242	NPN	230	230	15	130	35	-	7	5	3	8	0.8	TO-3PS	
2SA1986	PNP	-230	-230	-15	150	55	160	1	5	-1.5	-8	-0.8	TO-3PS	
2SC5358	NPN	230	230	15	150	35	-	7	5	1.5	8	0.8	TO-3PS	
2SA1987	PNP	-230	-230	-15	180	55	160	1	5	-1.5	-8	-0.8	TO-3PL	

产品型号 Part No.	极性 Polarity	BV_{CBO} (V)	BV_{CEO} (V)	I_C (A)	P_C (W)	HFE				$V_{CE(sat)}$ (V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I_C (A)	V_{CE} (V)	Max.	I_C (A)	I_B (A)		
2SC5359	NPN	230	230	15	180	35	-	7	5	1.5	8	0.8	TO-3PL	
2SA2031	PNP	-250	-230	-15	140	55	160	1	5	-2	-7.5	-0.75	TO-3PN	
2SC5669	NPN	250	230	15	140	35	-	7.5	5	2	7.5	0.75	TO-3PN	
2SA2063	PNP	-180	-160	-12	130	60	160	1	5	-2	-6	-0.6	TO-3PN	
2SC5775	NPN	180	160	12	130	35	-	6	5	2	6	0.6	TO-3PN	
2SA2120	PNP	-200	-200	-12	200	55	160	1	5	-3	-8	-0.8	TO-3PS	
2SC5948	NPN	200	200	12	200	35	-	7	5	3	8	0.8	TO-3PS	
2SA2121	PNP	-200	-200	-15	220	55	160	1	5	-3	-10	-1	TO-3PL	
2SC5949	NPN	200	200	15	220	35	-	8	5	3	10	1	TO-3PL	
2SA2151A	PNP	-230	-230	-15	160	55	160	1	5	-0.5	-5	-0.5	TO-3PN	
2SC6011A	NPN	230	230	15	160	50	-	3	4	0.5	5	0.5	TO-3PN	
2SA2221	PNP	-250	-230	-15	170	55	160	1	5	-2	-7.5	-0.75	TO-264	
2SC6141	NPN	250	230	15	170	35	-	7.5	5	2	7.5	0.75	TO-264	
2SA2223A	PNP	-260	-260	-15	160	55	160	1	5	-0.5	-5	-0.5	TO-3PN	
2SC6145A	NPN	260	260	15	160	40	140	5	4	0.5	5	0.5	TO-3PN	
2SB686	PNP	-100	-100	-6	60	55	160	1	5	-2	-4	-0.4	TO-3PS	
2SD716	NPN	100	100	6	60	35	-	3	5	2	4	0.4	TO-3PS	
2SB688	PNP	-120	-120	-8	80	55	160	1	5	-2.5	-5	-0.5	TO-3PS	
2SD718	NPN	120	120	8	80	35	-	4	5	2.5	5	0.5	TO-3PS	
2SB817	PNP	-160	-140	-12	120	80	160	1	5	-2	-5	-0.5	TO-3PN	
2SD1047	NPN	160	140	12	120	35	-	5	5	2	5	0.5	TO-3PN	
MJ1302A	PNP	-200	-200	-15	250	75	150	1	5	-3	-10	-1	TO-3	
MJ3281A	NPN	200	200	15	250	45	-	8	5	3	10	1	TO-3	
MJ15002	PNP	-140	-140	-15	200	75	150	1	5	-1	-4	-0.4	TO-3	
MJ15001	NPN	140	140	15	200	25	75	4	5	1	4	0.4	TO-3	

产品型号 Part No.	极性 Polarity	BV _{CBO} (V)	BV _{CEO} (V)	I _C (A)	P _C (W)	HFE				V _{CE} (sat)(V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I _C (A)	V _{CE} (V)	Max.	I _C (A)	I _B (A)		
MJ15004	PNP	-140	-140	-20	250	75	150	1	5	-1	-5	-0.5	TO-3	
MJ15003	NPN	140	140	20	250	25	150	5	2	1	5	0.5	TO-3	
MJ15012	PNP	-250	-250	-10	200	75	150	1	5	-1.1	-4	-0.4	TO-3	
MJ15011	NPN	250	250	10	200	25	75	4	5	1.1	4	0.4	TO-3	
MJ15016G	PNP	-200	-120	-15	180	75	150	1	5	-1.1	-4	-0.4	TO-3	
MJ15015G	NPN	200	120	15	180	25	75	4	5	1.1	4	0.4	TO-3	
MJ15023	PNP	-300	-200	-16	250	75	150	1	5	-1.4	-8	-0.8	TO-3	
MJ15022	NPN	300	200	16	250	15	60	8	4	1.4	8	0.8	TO-3	
MJ15025	PNP	-300	-250	-16	250	75	150	1	5	-1.4	-8	-0.8	TO-3	
MJ15024	NPN	300	250	16	250	15	60	8	4	1.4	8	0.8	TO-3	
MJ21193G	PNP	-300	-250	-16	250	75	150	1	5	-1.4	-8	-0.8	TO-3	
MJ21194G	NPN	300	250	16	250	25	75	8	5	1.4	8	0.8	TO-3	
MJ21195G	PNP	-300	-250	-16	250	75	150	1	5	-1.4	-8	-0.8	TO-3	
MJ21196G	NPN	300	250	16	250	25	100	8	5	1.4	8	0.8	TO-3	
MJL0302A	PNP	-260	-260	-15	180	75	150	1	5	-1	-5	-0.5	TO-264	
MJL0281A	NPN	260	260	15	180	75	150	3	5	1	5	0.5	TO-264	
MJL1302A	PNP	-260	-260	-15	200	75	150	1	5	-3	-10	-1	TO-264	
MJL3281A	NPN	260	260	15	200	45	-	8	5	3	10	1	TO-264	
MJL4302	PNP	-350	-350	-15	230	80	250	1	5	-1	-8	-0.8	TO-264	
MJL4281	NPN	-350	-350	15	230	50	-	8	5	1	8	0.8	TO-264	
MJL21193	PNP	-300	-250	-16	200	75	150	1	5	-1.4	-8	-0.8	TO-264	
MJL21194	NPN	300	250	16	200	25	75	8	5	1.4	8	0.8	TO-264	
MJL21195	PNP	-300	-250	-16	230	75	150	1	5	-1.4	-8	-0.8	TO-264	
MJL21196	NPN	300	250	16	230	25	100	8	5	1.4	8	0.8	TO-264	
MJW0302A	PNP	-260	-260	-15	180	75	150	1	5	-1	-5	-0.5	TO-247	

产品型号 Part No.	极性 Polarity	BV_{CBO} (V)	BV_{CEO} (V)	I_C (A)	P_C (W)	HFE				$V_{CE(sat)}$ (V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I_C (A)	V_{CE} (V)	Max.	I_C (A)	I_B (A)		
MJW0281A	NPN	260	260	15	180	75	150	3	5	1	5	0.5	TO-247	
MJW1302A	PNP	-230	-230	-15	200	50	200	1	5	-2	-10	-1	TO-247	
MJW3281A	NPN	230	230	15	200	45	-	8	5	2	10	1	TO-247	
MJW21191	PNP	-150	-150	-8	125	15	100	4	2	-2	-8	-1.6	TO-247	
MJW21192	NPN	150	150	8	125	5	-	8	2	2	8	1.6	TO-247	
MJW21193	PNP	-300	-250	-16	200	75	150	1	5	-1.4	-8	-0.8	TO-247	
MJW21194	NPN	300	250	16	200	25	75	8	5	1.4	8	0.8	TO-247	
MJW21195	PNP	-300	-250	-16	200	60	150	1	5	-1	-8	-0.8	TO-247	
MJW21196	NPN	300	250	16	200	20	80	8	5	1	8	0.8	TO-247	
NJW0302A	PNP	-300	-250	-16	180	60	150	1	5	-1.4	-8	-0.8	TO-3PN	
NJW0281A	NPN	300	250	16	180	20	80	8	5	1.4	8	0.8	TO-3PN	
NJW0302G	PNP	-250	-250	-15	150	75	150	1	5	-1	-5	-0.5	TO-3PN	
NJW0281G	NPN	250	250	15	150	75	150	3	5	1	5	0.5	TO-3PN	
NJW21193G	PNP	-300	-250	-16	200	60	150	1	5	-1.4	-9	-0.9	TO-3PN	
NJW21194G	NPN	300	250	16	200	20	80	9	5	1.4	9	0.9	TO-3PN	
THA0001	PNP	-300	-260	-15	150	80	160	1	5	-3	-7	-0.7	TO-3PL	
THC0001	NPN	300	260	15	150	35	-	7	5	3	7	0.7	TO-3PL	
THA0002	PNP	-300	-260	-16	180	55	160	1	5	-3	-8	-0.8	TO-3PL	
THC0002	NPN	300	260	16	180	35	-	7	5	3	8	0.8	TO-3PL	
THA0003	PNP	-300	-300	-17	230	75	150	1	5	-1.4	-8	-0.8	TO-264	
THC0003	NPN	300	300	17	230	25	75	8	5	1.4	8	0.8	TO-264	
THA0004	PNP	-300	-300	-19	280	80	250	1	5	-1	-10	-1	TO-264	
THC0004	NPN	300	300	19	280	50	-	10	5	1	10	1	TO-264	
THA0005	PNP	-300	-300	-21	320	75	150	1	5	-1.4	-11	-1.1	TO-264	
THC0005	NPN	300	300	21	320	25	100	11	5	1.4	11	1.1	TO-264	

产品型号 Part No.	极性 Polarity	BV _{CBO} (V)	BV _{CEO} (V)	I _C (A)	P _C (W)	HFE				V _{CE} (sat)(V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I _C (A)	V _{CE} (V)	Max.	I _C (A)	I _B (A)		
TIP36C	PNP	-100	-100	-25	125	25	-	1.5	5	-1.8	-15	-1.5	TO-218	
TIP35C	NPN	100	100	25	125	15	75	15	5	1.8	15	1.5	TO-218	
TIP2955	PNP	-60	-70	-15	90	20	70	4	4	-1.1	-4	-0.4	TO-218	
TIP3055	NPN	60	70	15	90	10	-	10	4	1.1	4	0.4	TO-218	
TTA0001	PNP	-160	-160	-18	150	80	160	1	5	-2	-9	-0.9	TO-3PS	
TTC0001	NPN	160	160	18	150	35	-	9	5	2	9	0.9	TO-3PS	
TTA0002	PNP	-160	-160	-18	180	80	160	1	5	-2	-9	-0.9	TO-3PL	
TTC0002	NPN	160	160	18	180	35	-	9	5	2	9	0.9	TO-3PL	
TTA1941	PNP	-140	-140	-10	100	55	160	1	5	-2	-7	-0.7	TO-3PS	
TTC5198	NPN	140	140	10	100	35	-	5	5	2	7	0.7	TO-3PS	
TTA1943	PNP	-230	-230	-15	150	80	160	1	5	-3	-8	-0.8	TO-3PL	
TTC5200	NPN	230	230	15	150	35	-	7	5	3	8	0.8	TO-3PL	

5、双极型晶体管（低压）产品列表

产品型号 Part No.	极性 Polarity	BV _{CBO} (V)	BV _{CEO} (V)	I _C (A)	P _C (W)	HFE				V _{CE} (sat)(V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I _C (A)	V _{CE} (V)	Max.	I _C (A)	I _B (A)		
2SB772	PNP	-40	-30	-3	10	60	400	-2	-1	-0.5	-2	-0.2	TO-126	2SB772
2SD882	NPN	40	30	3	10	60	400	2	1	0.5	2	0.2	TO-126	2SD882
2SB772A	PNP	-40	-30	-5	15	60	400	-2	-1	-0.5	-3	-0.3	TO-126	2SB772A
2SD882A	NPN	40	30	5	15	60	400	2	1	0.5	3	0.3	TO-126	2SD882A
D834	PNP	-80	-60	-3	30	40	320	-0.5	-5	-1	-3	-0.3	TO-220W	D834
D880	NPN	80	60	3	30	40	320	0.5	5	1	3	0.3	TO-220W	D880
H1061	NPN	80	80	3	30	40	320	1	1	1	3	0.3	TO-220W	
BD238	PNP	-100	-100	-2	25	60	300	-2	-1	-0.5	-2	-0.2	TO-126	BD140
BD237	NPN	100	100	2	25	60	300	2	1	0.5	2	0.2	TO-126	BD139
MJE253	PNP	-100	-100	-4	35	40	200	-1	-4	-1	-3	-0.3	TO-126	MJE172
MJE243	NPN	100	100	4	35	40	200	1	4	1	3	0.3	TO-126	MJE182
BD244	PNP	-100	-100	-6	65	30	150	-0.3	-4	-1.5	6	-1	TO-126	BD244
BD243	NPN	100	100	6	65	30	150	0.3	4	1.5	6	1	TO-126	BD243
2SA1220A	PNP	160	-160	-1.5	20	60	320	-0.3	-5	-1.3	-1	-0.2	TO-126	2SA1220A
2SC2690A	NPN	160	160	1.5	20	60	320	0.3	5	1.3	1	0.2	TO-126	2SC2690A
MJE2955T	PNP	-100	-60	-10	75	20	70	-4	4	-1	-4	-0.4	TO-220W	MJE2955T
MJE3055T	NPN	100	60	10	75	20	70	4	4	1	4	0.4	TO-220W	MJE3055T
TIP2955	PNP	-100	-60	-10	100	20	70	-4	-4	-1	-4	-0.4	TO-3PN	TIP2955
TIP3055	NPN	100	60	10	100	20	70	4	4	1	4	0.4	TO-3PN	TIP3055
MJ2955	PNP	-100	-60	-10	115	20	70	-4	-4	-1	-4	-0.4	TO-3	MJ2955
2N3055	NPN	100	60	15	115	20	70	4	4	1	4	0.4	TO-3	2N3055

产品型号 Part No.	极性 Polarity	BV_{CBO} (V)	BV_{CEO} (V)	I_C (A)	P_C (W)	HFE				$V_{CE(sat)}$ (V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I_C (A)	V_{CE} (V)	Max.	I_C (A)	I_B (A)		
TIP32C	PNP	-100	-100	-3	40	10	50	-3	-4	-1.2	-3	-0.38	TO-220W	TIP32C
TIP31C	NPN	100	100	3	40	10	50	3	4	1.2	3	0.375	TO-220W	TIP31C
TIP42C	PNP	-100	-100	-6	65	15	75	-3	-4	-1.5	-6	-0.6	TO-220W	TIP42C
TIP41C	NPN	100	100	6	65	15	75	3	4	1.5	6	0.6	TO-220W	TIP41C
TIP36C	PNP	-100	-100	-25	125	10	50	-15	-4	-1.8	-15	-1.5	TO-3PN	TIP36C
TIP35C	NPN	100	100	25	125	10	50	15	4	1.8	15	1.5	TO-3PN	TIP35C
MJE15029	PNP	-120	-120	-8	50	40	150	-3	-2	-0.5	-1	-0.1	TO-220W	MJE15029
MJE15028	NPN	120	120	8	50	40	150	3	2	0.5	1	0.1	TO-220W	MJE15028
MJE15031	PNP	-150	-150	-8	50	40	150	-3	-2	-0.5	-1	-0.1	TO-220W	MJE15031
MJE15030	NPN	150	150	8	50	40	150	3	2	0.5	1	0.1	TO-220W	MJE15030
MJE15033	PNP	-250	-250	-8	50	40	150	-3	-2	-0.5	-1	-0.1	TO-220W	MJE15033
MJE15032	NPN	250	250	8	50	40	150	3	2	0.5	1	0.1	TO-220W	MJE15032
2N6696	PNP	-140	-140	-15	250	25	100	-5	-5	-1	8	0.8	TO-3	2N6696
2N3773	NPN	140	140	-	250	25	100	5	5	1	8	0.8	TO-3	2N3773
2SA940	PNP	-150	-150	-1.5	-	40	140	-0.5	-10	-1.5	-0.5	-0.05	TO-220W	2SA940
2SC2073	NPN	150	150	1.5	-	40	140	0.5	10	1.5	0.5	0.05	TO-220W	2SC2073
2SA1837	PNP	-230	-230	-	-	100	320	-0.1	-5	-1.5	-0.5	-0.05	TO-220F	2SA1837
2SC4793	NPN	230	230	-	-	100	320	0.1	5	1.5	0.5	0.05	TO-220F	2SC4793
MJE350	PNP	-300	-300	-0.5	-	30	240	0.05	10	-	-	-	TO-126	MJE350
MJE340	NPN	300	300	0.5	-	30	240	0.05	10	-	-	-	TO-126	MJE340
BU406	NPN	400	200	-	-	40	140	2	5	1	5	0.5	TO-220F	BU406
2SC3834	NPN	200	120	-	-	70	-	3	4	0.5	3	0.3	TO-220C	2SC3834
2SC3835	NPN	200	120	-	-	70	-	3	4	0.5	3	0.3	TO-3PN	2SC3835

产品型号 Part No.	极性 Polarity	BV_{CBO} (V)	BV_{CEO} (V)	I_C (A)	P_C (W)	HFE				$V_{CE(sat)}$ (V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I_C (A)	V_{CE} (V)	Max.	I_C (A)	I_B (A)		
2N5685	NPN	100	60	-	300	25	100	5	5	1	15	1.5	TO-3	2N5685
TIP117	PNP	-100	-100	-	-	1000	-	-1	-4	-2.5	-2	-0.01	TO-220W	TIP117
TIP112	NPN	100	100	-	-	1000	-	1	4	2.5	2	0.008	TO-220W	TIP112
TIP127	PNP	-100	-100	-	-	1000	-	-3	-3	-4	-5	-0.02	TO-220W	TIP127
TIP122	NPN	100	100	-	-	1000	-	3	3	4	5	0.02	TO-220W	TIP122
TIP137	PNP	-100	-100	-	-	1000	20000	-3	-4	-2	-3	-0.06	TO-220W	TIP137
TIP132	NPN	100	100	-	-	1000	20000	3	4	2	3	0.06	TO-220W	TIP132
TIP147T	PNP	-100	-100	-10	100	1000	-	-5	-4	-2	-5	-0.01	TO-220W	TIP147T
TIP142T	NPN	100	100	-	100	1000	-	5	4	2	5	0.01	TO-220W	TIP142T
TIP147	PNP	-100	-100	-10	125	1000	-	-5	-4	-2	-5	-0.01	TO-3PN	TIP147
TIP142	NPN	100	100	-	125	1000	-	5	4	2	5	0.01	TO-3PN	TIP142
BU941T	NPN	400	400	-	150	1000	-	5	10	1	5	0.01	TO-220C	BU941T
BU941P	NPN	400	400	-	150	1000	-	5	10	1	5	0.01	TO-3PN	BU941P
2SA1693	PNP	-80	-80	-	-	50	-	-2	-4	-1.5	-2	-0.2	TO-3PN	2SA1693
2SC4466	NPN	80	80	-	-	50	-	2	4	1.5	2	0.2	TO-3PN	2SC4466
2SA1694	PNP	-120	-120	-	-	50	-	-3	-4	-1.5	-3	-0.3	TO-3PN	2SA1694
2SC4467	NPN	120	120	-	-	50	-	3	4	1.5	3	0.3	TO-3PN	2SC4467
2SA1695	PNP	-140	-140	-10	100	50	-	-3	-4	-0.5	-5	-0.5	TO-3PN	2SA1695
2SC4468	NPN	140	140	-	100	50	-	3	4	0.5	5	0.5	TO-3PN	2SC4468
NJW0302G	PNP	-250	-250	-15	150	75	150	-3	-5	-1	-5	-0.5	TO-3PN	NJW0302G
NJW0281G	NPN	250	250	-	150	75	150	3	5	1	5	0.5	TO-3PN	NJW0281G
2SA1943	PNP	-250	-250	-15	150	35	100	-7	-5	-3	-8	-0.8	TO-3PL	2SA1943
MJ15024	PNP	-400	-250	-16	250	15	60	-8	-4	-1.4	-8	-0.8	TO-3	MJ15024

产品型号 Part No.	极性 Polarity	BV _{CBO} (V)	BV _{CEO} (V)	I _C (A)	P _C (W)	HFE				V _{CE} (sat)(V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I _C (A)	V _{CE} (V)	Max.	I _C (A)	I _B (A)		
MJ15025	NPN	400	250	-	250	15	60	8	4	1.4	8	0.8	TO-3	MJ15025
2SC5200	NPN	250	250	-	150	35	100	7	5	3	8	0.8	TO-3PL	2SC5200
MJ15003	PNP	-140	-140	-20	250	25	150	-5	-2	-1	-5	-0.5	TO-3	MJ15003
MJ15004	NPN	140	140	-	250	25	150	5	2	1	5	0.5	TO-3	MJ15004
2SB1216	PNP	-120	-4	-	-	40	400	-1	-1	-0.5	-2	-0.2	TO-252	2SB1216
2SD1816	NPN	120	4	-	-	40	400	1	1	0.5	2	0.2	TO-252	2SD1816

6、双极型晶体管（高压、开关）产品列表

产品型号 Part No.	极性 Polarity	BV _{CBO} (V)	BV _{CEO} (V)	I _C (A)	P _C (W)	HFE			V _{CE} (sat)(V)				Ts(μS)UI9600			封装 Package	可替换产品 Cross Reference
						Min.	Max.	V _{CE} (V)	I _C (A)	Max.	I _C (A)	I _B (A)	Min.	Max.	I _C (A)		
3DD4002C	NPN	700	400	2	50	15	30	5	0.5	0.8	1	0.25	2	4	0.25	TO-220C	MJE13003T
3DD4004C	NPN	700	400	4	70	15	35	5	1	1	2	0.5	2	4	0.5	TO-220C	MJE13005M
3DD4006C	NPN	700	400	6	75	15	35	5	1	1	2	0.5	2	4	0.5	TO-220C	MJE13005K
3DD4008C	NPN	700	400	8	80	15	35	5	2	1	5	1	2	4	0.5	TO-220C	MJE13007M/FJP13007
3DD4010C	NPN	700	400	10	90	15	35	5	2	1	5	1	2	4	0.5	TO-220C	MJE13007K
3DD4012C	NPN	700	400	12	100	15	35	5	3	1	8	1.6	2	4	0.5	TO-220C	MJE13009M
3DD4015C	NPN	700	400	15	120	15	35	5	3	1.2	8	1.6	2	4	0.5	TO-220C	MJE13009K
3DD4010B	NPN	700	400	10	100	15	35	5	2	1	5	1	2	4	0.5	TO-3PN	2SC2625
3DD4012B	NPN	700	400	12	120	15	35	5	3	1	8	1.6	2	4	0.5	TO-3PN	FJA13009(仙童)
3DD4015B	NPN	700	400	15	130	15	35	5	3	1.2	8	1.6	2	4	0.5	TO-3PN	2SC2625A/2SC3306
3DD4020B	NPN	700	400	20	180	15	35	5	5	1	12	3	2	4	0.5	TO-3PN	2SC3320/D4515
3DD4025B	NPN	700	400	25	270	15	35	5	6	1	15	4	2	4	0.5	TO-3PN	2SC3320A
3DD4030L	NPN	700	400	30	320	15	35	5	6	1	18	5	2	4	0.5	TO-3PL	BUS13AP
3DD6005B	NPN	1100	600	5	80	15	30	5	1	1	3	0.5	2	6	0.5	TO-3PN	2SC3679
3DD6008B	NPN	1100	600	8	100	15	30	5	1	1	4	0.8	2	6	0.5	TO-3PN	BU508A
3DD6012B	NPN	1100	600	12	120	15	35	5	1	1	6	1.2	2	6	0.5	TO-3PN	2SC4706
3DD6015B	NPN	1100	600	15	150	15	35	5	1	1	8	1.5	2	6	0.5	TO-3PN	2SC4706A
3DD6020L	NPN	1100	600	20	200	15	40	5	2	1.5	15	3	2	6	0.5	TO-3PL	
3DD6025L	NPN	1100	600	25	250	15	40	5	3	1.5	15	2.5	2	6	0.5	TO-3PL	
3DD6030L	NPN	1100	600	30	320	15	40	5	3	1	15	3	2	6	0.5	TO-3PL	
3DD6007F	NPN	1200	600	7	75	15	35	5	1	1	3	0.5	2	6	0.5	TO-220F	
3DD1207RF	NPN	1200	1200	7	75	15	35	5	1	1	3	0.5	2	6	0.5	TO-220F	
3DD6070E	NPN	1200	600	7	90	15	35	5	1	1	3	0.5	2	6	0.5	TO-3PF	

产品型号 Part No.	极性 Polarity	BV _{CBO} (V)	BV _{CEO} (V)	I _C (A)	P _C (W)	HFE			V _{CE} (sat)(V)				Ts(μS)UI9600			封装 Package	可替换产品 Cross Reference
						Min.	Max.	V _{CE} (V)	I _C (A)	Max.	I _C (A)	I _B (A)	Min.	Max.	I _C (A)		
3DD1207RE	NPN	1200	1200	7	90	15	35	5	1	1	3	0.5	2	6	0.5	TO-3PF	
3DD6010E	NPN	1200	600	10	120	15	35	5	1	1	4	0.8	2	6	0.5	TO-3PF	
3DD12010RE	NPN	1200	1200	10	120	15	35	5	1	1	4	0.8	2	6	0.5	TO-3PF	
3DD8002Q	NPN	1500	800	1.5	30	15	40	5	0.5	1.5	0.5	0.1	2	4	0.25	TO-126	
3DD8003C	NPN	1500	800	2.5	70	15	40	5	1	1.5	1	0.1	2	4	0.25	TO-220C	
3DD8004C	NPN	1500	800	3.5	75	15	40	5	1	2	1.5	0.3	4	10	0.5	TO-220C	
3DD8005B	NPN	1500	800	5	80	15	40	5	1	3	3.2	0.63	3	8	0.5	TO-3PN	
3DD8008B	NPN	1500	800	8	100	15	40	5	2	1	4.5	2	3	6	0.5	TO-3PN	
3DD8012B	NPN	1500	800	12	120	15	40	5	2.5	2	8	2	3	8	0.5	TO-3PN	
3DD8015B	NPN	1600	800	15	150	15	40	5	3	3	11	2.75	3	8	0.5	TO-3PN	
3DD8015L	NPN	1600	800	15	180	15	40	5	3	3	11	2.75	3	8	0.5	TO-3PL	
3DD8020L	NPN	1700	800	20	200	15	40	5	3.5	2.5	11	2.75	3	8	0.5	TO-3PL	FJL6920
3DD8025L	NPN	1600	800	25	250	15	40	5	3.5	3	15	3.75	3	8	0.5	TO-3PL	2SC5453

7、快恢复二极管产品列表

产品型号 Part No.	I_F (A)	V_R (V)	Trr(ns)@ $I_F=0.5A, I_R=1A,$ $I_{rr}=0.25A$		Trr(ns)@ $I_F=1A, di/dt=200A/\mu s,$ $V_R=30V$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=25^{\circ}C$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=125^{\circ}C$		封装 Package	可替换产品 Cross Reference
	Spec	Min.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.		
THR10U02SF2	10	200	30	22	25	18	1.15	0.98	1.05	0.9	TO-220F-2L	
THR10U02DF	10	200	30	22	25	16	1.15	1.00	1.05	0.95	TO-220F	
MUR1220CTR	12	200	35	25	30	20	1.1	0.90	1.0	0.8	TO-220F	
THR12U02DF	12	200	35	25	30	20	1.1	0.90	1.0	0.8	TO-220F	
THR12U02RF	12	200	35	25	30	20	1.1	0.90	1.0	0.8	TO-220F	
THR15U02SC2	15	200	25	18	30	23	1.05	0.92	0.95	0.8	TO-220C-2L	
THR15U02SF2	15	200	30	23	25	18	1.05	0.92	0.95	0.8	TO-220F-2L	
MUR1620CTR	16	200	35	25	30	20	1.15	1.00	1.1	0.9	TO-220F	
THR16U02DC	16	200	35	25	30	20	1.15	1.00	1.1	0.9	TO-220C	
THR16U02DF	16	200	35	25	30	20	1.15	0.98	1.05	0.9	TO-220F	
THR16U02RF	16	200	35	25	30	20	1.15	0.98	1.05	0.9	TO-220F	
D92-02M	18	200	30	23	25	18	1	0.90	0.9	0.77	TO-3P	
D92-02H	20	200	30	23	25	17	0.96	0.88	0.9	0.75	TO-3P	
L4202S	20	200	30	23	25	17	1.2	0.88	1	0.79	TO-3PF	
THR20U02DF	20	200	30	23	25	16	1.15	0.93	1.15	0.83	TO-220F	
THR20U02RF	20	200	30	23	25	16	1.15	0.93	1.05	0.83	TO-220F	
THR20U02DK	20	200	30	23	25	17	0.96	0.88	0.9	0.75	TO-247	
THR30U02DF	30	200	30	23	25	18	1.05	0.92	0.95	0.8	TO-220F	
THR30U02DK	30	200	30	25	30	18	1	0.90	0.9	0.8	TO-247	

产品型号 Part No.	I_F (A)	V_R (V)	Trr(ns)@ $I_F=0.5A, I_R=1A,$ $I_{RR}=0.25A$		Trr(ns)@ $I_F=1A, di/dt=200A/\mu s,$ $V_R=30V$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=25^\circ C$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=125^\circ C$		封装 Package	可替换产品 Cross Reference
	Spec	Min.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.		
THR40U02DB	40	200	35	25	30	18	1.05	0.96	1	0.86	TO-3PN	
THR60U02DB	60	200	35	30	35	21	1.05	0.98	0.95	0.85	TO-3PN	
THR70U02DB	70	200	35	30	35	22	1.05	0.98	0.95	0.85	TO-3P	
THR75U02DB	75	200	35	30	35	22	1.05	0.98	0.95	0.85	TO-3PN	
THR80U02DB	80	200	35	30	35	25	1.05	0.96	0.95	0.85	TO-3P	
THR100U02DB	100	200	35	30	35	25	1.15	1.06	1.05	0.95	TO-3P	
THR30U03SC2	30	300	45	35	40	26	1.2	0.96	1	0.85	TO-220C-2L	
THR30U03SK2	30	300	45	35	40	26	1.2	0.96	1	0.85	TO-247-2L	
F40UP30DB	40	300	40	33	35	23	1.2	0.98	1	0.9	TO-3PN	
THR40U03DB	40	300	40	33	35	23	1.2	0.98	1	0.9	TO-3PN	
THR40U03DF	40	300	40	33	35	23	1.2	0.98	1	0.9	TO-220F	
F50UP30DB	50	300	40	33	35	26	1.2	0.96	1	0.85	TO-3PN	
F60UP30DB	60	300	40	33	35	26	1.2	0.96	1	0.85	TO-3PN	
THR60U03DH	60	300	45	35	40	26	1.2	0.96	1	0.85	TO-3PH	
F80UP30DB	80	300	40	35	35	26	1.2	1.00	1	0.9	TO-3PN	
THR80U03DB	80	300	40	35	35	26	1.2	1.00	1	0.9	TO-3PN	
THR10U04DN	10	400	40	30	35	21	1.35	1.20	1.25	1.1	TO-263	
MUR1640CA	16	400	40	30	35	22	1.5	1.20	1.4	1.1	TO-220F	
MUR1640CT	16	400	40	30	35	22	1.5	1.20	1.4	1.1	TO-220F	
THR16U04DC	16	400	40	30	35	22	1.5	1.20	1.4	1.1	TO-220C	
THR16U04DF	16	400	40	30	35	22	1.5	1.20	1.4	1.1	TO-220F	

产品型号 Part No.	I_F (A)	V_R (V)	Trr(ns)@ $I_F=0.5A, I_R=1A,$ $I_{RR}=0.25A$		Trr(ns)@ $I_F=1A, di/dt=200A/\mu s,$ $V_R=30V$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=25^\circ C$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=125^\circ C$		封装 Package	可替换产品 Cross Reference
	Spec	Min.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.		
L4204S	20	400	50	30	30	22	1.45	1.10	1.3	0.9	TO-3PF	
THR20U04DC	20	400	40	30	35	21	1.5	1.20	1.4	1.1	TO-220C	
THR20U04DF	20	400	40	30	35	21	1.5	1.20	1.4	1.1	TO-220F	
THR20U04DK	20	400	50	30	30	22	1.4	1.25	1.3	1.15	TO-247	
THR20U04DN	20	400	40	30	35	21	1.5	1.20	1.4	1.1	TO-263	
THR20U04SC2	20	400	50	30	30	22	1.5	1.25	1.35	1.1	TO-220C-2L	
THR20U04SF2	20	400	50	30	30	22	1.5	1.25	1.4	1.1	TO-220F-2L	
THR30U04DC	30	400	40	32	35	24	1.5	1.10	1.3	1	TO-220C	
THR30U04DF	30	400	40	32	35	24	1.45	1.10	1.3	1	TO-220F	
THR30U04RF	30	400	40	32	35	24	1.45	1.10	1.3	1	TO-220F	
THR30U04DK	30	400	40	32	35	24	1.5	1.10	1.3	1	TO-247	
THR30U04SC2	30	400	55	35	35	25	1.5	1.15	1.4	1	TO-220C-2L	
THR30U04SK2	30	400	55	35	35	25	1.5	1.15	1.4	1	TO-247-2L	
THR40U04DK	40	400	50	30	30	22	1.5	1.25	1.4	1	TO-247	
THR60U04SK	60	400	70	50	40	30	1.55	1.20	1.45	1.1	TO-247	
THR60U04SK2	60	400	70	50	40	30	1.55	1.20	1.45	1.1	TO-247-2L	
F80UP40DB	80	400	55	35	35	25	1.6	1.20	1.4	1.1	TO-3PN	
THR80U04DB	80	400	55	35	35	25	1.6	1.20	1.4	1.1	TO-3PN	
THR80U04DK	80	400	55	35	35	25	1.4	1.20	1.3	1.1	TO-247	
THR80U04SB	80	400	70	50	40	30	1.55	1.30	1.45	1.2	TO-3PN	
THR100U04SB	100	400	80	55	50	33	1.55	1.35	1.45	1.25	TO-3PN	

产品型号 Part No.	I_F (A)	V_R (V)	Trr(ns)@ $I_F=0.5A, I_R=1A,$ $I_{RR}=0.25A$		Trr(ns)@ $I_F=1A, di/dt=200A/\mu s,$ $V_R=30V$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=25^\circ C$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=125^\circ C$		封装 Package	可替换产品 Cross Reference
	Spec	Min.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.		
THR5U06SC2	5	600	23	17	-	-	2.2	1.70	2.0	1.5	TO-220C-2L	
THR5U06SQ2	5	600	50	35	30	24	1.9	1.50	1.7	1.2	TO-126-2L	
THR8U06SC2	8	600	50	32	35	21	1.7	1.40	1.6	1.25	TO-220C-2L	
THR8U06SF2	8	600	50	32	35	21	1.7	1.35	1.6	1.25	TO-220F-2L	
THR8U06SG	8	600	50	32	35	21	1.7	1.35	1.6	1.25	TO-252	
THR8U06SN	8	600	50	32	35	21	1.7	1.35	1.6	1.25	TO-263	
THR8S06SF2	8	600	40	14	-	-	1.9	1.65	1.8	1.55	TO-220F-2L	
THR10U06DF	10	600	50	30	35	21	1.5	1.30	1.4	1.2	TO-220F	
THR10U06RF	10	600	35	21	50	30	1.5	1.30	1.4	1.2	TO-220F	
THR10U06SC2	10	600	50	35	30	24	1.7	1.40	1.6	1.25	TO-220C-2L	
THR12U06SC2	12	600	50	35	35	24	1.6	1.35	1.5	1.25	TO-220C-2L	
THR15U06SC2	15	600	29	23	-	-	2.0	1.5	1.8	1.3	TO-220C-2L	
THR16U06DC	16	600	50	32	35	21	1.7	1.35	1.6	1.25	TO-220C	
THR16U06DF	16	600	50	32	35	21	1.7	1.35	1.6	1.25	TO-220F	
THR16U06RF	16	600	50	32	35	21	1.7	1.35	1.6	1.25	TO-220F	
THR16U06SC2	16	600	40	30	25	20	2.1	1.65	1.9	1.55	TO-220C-2L	
THR20U06SF2	20	600	34	24	-	-	1.8	1.45	1.7	1.35	TO-220F-2L	
THR20U06SC2	20	600	34	24	-	-	1.8	1.45	1.7	1.35	TO-220C-2L	
MUR2060CA	20	600	50	35	30	24	1.7	1.30	1.6	1.2	TO-220F	
MUR2060CT	20	600	45	35	32	22	1.8	1.40	1.6	1.3	TO-220F	
THR20U06DC	20	600	50	35	35	25	1.7	1.35	1.6	1.2	TO-220C	

产品型号 Part No.	I_F (A)	V_R (V)	Trr(ns)@ $I_F=0.5A, I_R=1A,$ $I_{RR}=0.25A$		Trr(ns)@ $I_F=1A, di/dt=200A/\mu s,$ $V_R=30V$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=25^\circ C$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=125^\circ C$		封装 Package	可替换产品 Cross Reference
	Spec	Min.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.		
THR20U06DF	20	600	45	35	32	22	1.8	1.40	1.6	1.3	TO-220F	
THR20U06RF	20	600	50	35	30	24	1.7	1.30	1.6	1.2	TO-220F	
THR20U06DK	20	600	40	27	35	25	1.55	1.35	1.65	1.35	TO-247	
THR25U06DF	25	600	50	35	35	24	1.65	1.35	1.55	1.25	TO-220F	
THR25U06RF	25	600	50	35	35	24	1.65	1.35	1.55	1.25	TO-220F	
THR30U06DF	30	600	50	35	35	24	1.7	1.20	1.6	1.25	TO-220F	
THR30U06RF	30	600	50	35	35	24	1.7	1.20	1.6	1.25	TO-220F	
THR30U06SC2	30	600	-	-	40	29	1.8	1.40	1.5	1.1	TO-220C-2L	
THR30S06SC2	30	600	-	-	35	24	2.1	1.70	1.9	1.45	TO-220C-2L	
THR30H06SC2	30	600	-	-	35	22	2.5	2.00	2.2	1.75	TO-220C-2L	
THR30U06SF2	30	600	-	-	40	29	1.8	1.40	1.5	1.1	TO-220F-2L	
THR30S06SF2	30	600	-	-	35	24	2.1	1.70	1.9	1.45	TO-220F-2L	
THR30H06SF2	30	600	-	-	35	22	2.5	2.00	2.2	1.75	TO-220F-2L	
THR30U06SKH2	30	600	-	-	40	29	1.8	1.40	1.5	1.1	TO-247H-2L	
THR30S06SKH2	30	600	-	-	35	24	2.1	1.70	1.9	1.45	TO-247H-2L	
THR30H06SKH2	30	600	-	-	35	22	2.5	2.00	2.2	1.75	TO-247H-2L	
THR40U06SK2	40	600	65	45	45	32	1.7	1.45	1.6	1.2	TO-247-2L	
THR60U06DB	60	600	50	35	40	28	1.6	1.30	1.4	1.05	TO-3PN	
THR60U06DK	60	600	50	35	40	28	1.6	1.30	1.4	1.05	TO-247	
THR60U06DE	60	600	50	35	40	28	1.6	1.30	1.4	1.05	TO-3PF	
THR60U06SB	60	600	70	50	45	32	1.8	1.45	1.7	1.3	TO-3PN	

产品型号 Part No.	I_F (A)	V_R (V)	Trr(ns)@ $I_F=0.5A, I_R=1A,$ $I_{RR}=0.25A$		Trr(ns)@ $I_F=1A, di/dt=200A/\mu s,$ $V_R=30V$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=25^\circ C$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=125^\circ C$		封装 Package	可替换产品 Cross Reference
	Spec	Min.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.		
THR60U06SE	60	600	70	50	45	32	1.8	1.45	1.7	1.3	TO-3PF	
THR60U06SH	60	600	70	50	45	32	1.8	1.45	1.7	1.3	TO-3PH	
THR60U06SK	60	600	70	50	45	32	1.8	1.45	1.7	1.3	TO-247	
THR60U06SK2	60	600	70	50	45	32	1.8	1.45	1.7	1.3	TO-247-2L	
THR75U06SK2	75	600	75	40	-	-	2.2	1.60	2.1	1.45	TO-247-2L	
THR80U06DB	80	600	65	45	45	32	1.8	1.45	1.7	1.2	TO-3PN	
THR80U06DH	80	600	55	43	40	32	1.8	1.45	1.6	1.2	TO-3PH	
THR80U06SB	80	600	80	55	50	32	1.8	1.45	1.7	1.35	TO-3PN	
THR80U06SH	80	600	80	55	50	32	1.8	1.45	1.7	1.35	TO-3PH	
THR80U06SK	80	600	80	55	50	32	1.8	1.45	1.7	1.35	TO-247	
THR80U06SK2	80	600	80	55	50	32	1.8	1.45	1.7	1.35	TO-247-2L	
THR80U06SL	80	600	80	55	50	32	1.8	1.45	1.7	1.35	TO-264	
THR80U06SE	80	600	80	55	50	32	1.8	1.45	1.7	1.35	TO-3PF	
THR100U06DB	100	600	65	45	45	32	1.8	1.55	1.7	1.3	TO-3PN	
THR150U06SKH2	150	600	85	70	75	65	1.8	1.50	1.7	1.4	TO-247H-2L	
L4206S	20	650	50	35	35	24	1.7	1.30	1.6	1.2	TO-3PF	
THR8U12SC2	8	1200	50	40	35	25	2.5	2.10	2.5	1.95	TO-220C-2L	
THR8U12SF2	8	1200	50	40	35	25	2.5	2.10	2.5	1.95	TO-220F-2L	
THR8U12SC2	8	1200	50	31	-	-	3.3	2.30	3	2.1	TO-220C-2L	
THR10U12SC2	10	1200	50	40	36	26	2.7	2.10	2.5	1.95	TO-220C-2L	
THR15U12SC2	15	1200	60	50	50	32	2.5	1.80	2.3	1.5	TO-220C-2L	

产品型号 Part No.	I_F (A)	V_R (V)	Trr(ns)@ $I_F=0.5A, I_R=1A,$ $I_{rr}=0.25A$		Trr(ns)@ $I_F=1A, di/dt=200A/\mu s,$ $V_R=30V$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=25^\circ C$		V_F (V)@ $I_F=I_F$ (Per leg), $T_a=125^\circ C$		封装 Package	可替换产品 Cross Reference
	Spec	Min.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.		
THR15U12SK2	15	1200	60	50	50	32	2.5	1.80	2.3	1.5	TO-247-2L	
THR16U12DC	16	1200	50	40	35	25	2.7	2.10	2.5	1.95	TO-220C	
THR20U12SC2	20	1200	70	50	50	32	2.7	2.10	2.5	1.85	TO-220C-2L	
THR30U12DK	30	1200	60	50	50	32	2.5	1.80	2.4	1.5	TO-247	
THR30U12SC2	30	1200	50	32	70	50	2.7	2.10	2.5	1.85	TO-220C-2L	
THR30U12SK2	30	1200	70	50	50	32	2.7	2.10	2.5	1.85	TO-247-2L	
THR40U12SK2	40	1200	75	55	50	40	2.6	2.60	2.5	1.8	TO-247-2L	
THR60U12DK	60	1200	70	50	50	32	2.7	2.10	2.2	1.85	TO-247	
THR60U12SKH2	60	1200	70	50	50	32	2.7	1.80	2.2	1.85	TO-247H-2L	
THR75U12SKH2	75	1200	90	62	-	-	2.9	2.20	2.8	1.9	TO-247H-2L	
THR120U12SK2	120	1200	130	90	70	56	2.6	2.00	2.3	1.9	TO-247-2L	

8、肖特基二极管产品列表

产品型号 Part No.	V_{RRM} (V)	I_F (A)	I_{FSM} (A)	V_F (mV)@ I_F (A), (per leg),25°C	I_R (μA)@25°C, $V_R=V_R$ Rated	I_R (mA)@125°C, $V_R=V_R$ Rated	封装 Package	可替换产品 Cross Reference
MBR10C45DP	45	2*5	120	530	50	4	TO-220F	
MBR10C60DP	60	2*5	120	650	50	4	TO-220F	
MBR10C100DP	100	2*5	110	770	3	4	TO-220F	
MBR10C200DP	200	2*5	110	870	3	4	TO-220F	
MBR15C100DP	100	2*7.5	125	780	3	4	TO-220F	
MBR15C200DP	200	2*7.5	125	860	3	4	TO-220F	
MBR20C45DF	45	2*10	175	500	50	50	TO-220F	
MBR20C60DF	60	2*10	175	650	50	50	TO-220F	
MBR20C100DF	100	2*10	135	800	3	5	TO-220F	
MBR20C200DF	200	2*10	135	880	3	4	TO-220F	
MBR25C100DF	100	2*12.5	150	770	3	5	TO-220F	
MBR25C200DF	200	2*12.5	150	850	3	4	TO-220F	
MBR30C45DF	45	2*15	300	550	50	-	TO-220F	
MBR30C60DF	60	2*15	300	630	50	-	TO-220F	
MBR30C100DF	100	2*15	180	770	3	5	TO-220F	
MBR30C200DF	200	2*15	160	860	3	4	TO-220F	
MBR35C100DF	100	2*17.5	200	800	3	5	TO-220F	
MBR30C45DK	45	2*15	300	550	50	-	TO-247	
MBR30C60DK	60	2*15	300	630	50	-	TO-247	
MBR30C100DK	100	2*15	180	815	3	5	TO-247	

MBR30C200DK	200	2*15	160	860	3	4	TO-247	
MBR35C100DK	100	2*17.5	200	800	3	5	TO-247	
MBR40C45DK	45	2*20	300	550	50	-	TO-247	
MBR40C60DK	60	2*20	300	700	50	-	TO-247	
MBR40C100DK	100	2*20	250	770	3	5	TO-247	
MBR50C100DK	100	2*25	300	780	4	5.5	TO-247	
MBR60C45DK	45	2*30	400	550	50	-	TO-247	
MBR60C60DK	60	2*30	400	720	50	-	TO-247	
MBR60C100DK	100	2*30	350	810	4	5.5	TO-247	
MBR70C100DK	100	2*35	400	830	50	-	TO-247	
MBR80C45DK	45	2*40	400	550	100	-	TO-247	
MBR80C60DK	60	2*40	400	700	100	-	TO-247	
MBR80C100DK	100	2*40	500	780	8	12	TO-247	
MBR120C100DL	100	2*60	700	800	25	10	TO-3PL	

9、TMBS 产品列表

产品型号 Part No.	V_{RRM} (V)	I_F (A)	I_{FSM} (A)	V_F (mV)@ I_F (A), (per leg),25°C	I_R (mA)@25°C, $V_R=V_R$ Rated	I_R (mA)@125°C, $V_R=V_R$ Rated	封装 Package	可替换产品 Cross Reference
QC4045P	45	40	400	550	0.5	60	Power Tab-KK	
QC4045T	45	40	400	500	0.1	20	Power Tab-KK	
THS18P45JKS	45	18	180	550	0.2	30	Power Tab-JK	
THS18P45KKS	45	18	180	550	0.2	30	Power Tab-KK	
THS18P45THS	45	18	180	550	0.2	30	Power Tab-TH	
THS18P45JASA	45	18	180	550	0.2	30	Power Tab-JA	
THS18P45JASK	45	18	180	550	0.2	30	Power Tab-JA	
THS25T45JKS	45	25	250	520	0.1	15	Power Tab-JK	
THS25T45KKS	45	25	250	520	0.1	15	Power Tab-KK	
THS25T45THS	45	25	250	520	0.1	15	Power Tab-TH	
THS25T45NS	45	25	250	520	0.1	15	TO-263	
THS25T45RS	45	25	250	520	0.1	15	R-6	
THS25P45JKS	45	25	250	570	0.5	40	Power Tab-JK	
THS25P45KKS	45	25	250	570	0.5	40	Power Tab-KK	
THS25P45THS	45	25	250	570	0.5	40	Power Tab-TH	
THS25P45NS	45	25	250	570	0.5	40	TO-263	
THS25P45RS	45	25	250	570	0.5	40	R-6	
THS30T45JKS	45	30	300	500	0.1	20	Power Tab-JK	
THS30T45KKS	45	30	300	500	0.1	20	Power Tab-KK	
THS30T45THS	45	30	300	500	0.1	20	Power Tab-TH	
THS30T45JASA	45	30	300	500	0.1	20	Power Tab-JA	
THS30T45JASK	45	30	300	500	0.1	20	Power Tab-JA	
THS30T45NS	45	30	300	500	0.1	20	TO-263	

产品型号 Part No.	V_{RRM} (V)	I_F (A)	I_{FSM} (A)	V_F (mV)@ I_F (A), (per leg),25°C	I_R (mA)@25°C, $V_R=V_R$ Rated	I_R (mA)@125°C, $V_R=V_R$ Rated	封装 Package	可替换产品 Cross Reference
THS30T45RS	45	30	300	500	0.1	20	R-6	
THS30P45NS	45	30	300	550	0.5	60	TO-263	
THS30P45RS	45	30	300	550	0.5	60	R-6	
THS40T45JKS	45	40	400	520	0.1	30	Power Tab-JK	
THS40T45KKS	45	40	400	520	0.1	30	Power Tab-KK	
THS40T45THS	45	40	400	520	0.1	30	Power Tab-TH	
THS40T45JASA	45	40	400	520	0.1	30	Power Tab-JA	
THS40T45JASK	45	40	400	520	0.1	30	Power Tab-JA	
THS40T45NS	45	40	400	520	0.1	30	TO-263	
THS40T45RS	45	40	400	520	0.1	30	R-6	
THS50T45JKS	45	50	500	520	0.1	30	Power Tab-JK	
THS50T45KKS	45	50	500	520	0.1	30	Power Tab-KK	
THS50T45THS	45	50	500	520	0.1	30	Power Tab-TH	
THS50T45JASA	45	50	500	520	0.1	30	Power Tab-JA	
THS50T45JASK	45	50	500	520	0.1	30	Power Tab-JA	
THS60T45JKD	45	60	600	500	0.2	50	Power Tab-JK	
THS60T45KKD	45	60	600	500	0.2	50	Power Tab-KK	
THS60T45THD	45	60	600	500	0.2	50	Power Tab-TH	
THS60T45JADA	45	60	600	500	0.2	50	Power Tab-JA	
THS60T45JADK	45	60	600	500	0.2	50	Power Tab-JA	
THS80T45JKD	45	80	800	520	0.2	60	Power Tab-JK	
THS80T45KKD	45	80	800	520	0.2	60	Power Tab-KK	
THS80T45THD	45	80	800	520	0.2	60	Power Tab-TH	
THS80T45JADA	45	80	800	520	0.2	60	Power Tab-JA	
THS80T45JADK	45	80	800	520	0.2	60	Power Tab-JA	

10、电源管理 IC 产品列表

一. 1.5A 正电压稳压电路											
产品型号 Part No.	I _o (A)	V _o (V)		V _o 测试条件	I _Q (mA)			SVR(dB)			SVR 测试条件
		Min.	Max.	1 mA < I _o < 40 mA; V _I	Min.	Typ.	Max.	Min.	Typ.	Max.	
LM7805T	1.5	4.65	5.35	I _o =5mA to1A,P _o <15W,V _i =8to20V	-	-	6	68	-	-	V _i =8to18V, f=120Hz
LM7806T	1.5	5.65	6.35	I _o =5mA to1A,P _o <15W,V _i =9to21V	-	-	6	65	-	-	V _i =9to19V, f=120Hz
LM7808T	1.5	7.6	8.4	I _o =5mA to1A,P _o <15W,V _i =11.5to23V	-	-	6	62	-	-	V _i =11.5to21.5V, f=120Hz
LM7809T	1.5	8.55	9.45	I _o =5mA to1A,P _o <15W,V _i =11.5to26V	-	-	6	55	-	-	V _i =12to23V, f=120Hz
LM7812T	1.5	11.4	12.6	I _o =5mA to1A,P _o <15W,V _i =15.5to27V	-	-	6	60	-	-	V _i =18.5to28.5V, f=120Hz
LM7815T	1.5	14.5	15.6	I _o =5mA to1A,P _o <15W,V _i =17.5to30V	-	-	8	54	-	-	V _i =24to35V, f=120Hz
LM7818T	1.5	17.1	18.9	I _o =5mA to1A,P _o <15W,V _i =23to35V	-	-	8	52	-	-	V _i =28to38V, f=120Hz
LM7824T	1.5	22.8	25.2	I _o =5mA to1A,P _o <15W,V _i =27to38V	-	-	8	50	-	-	f=120Hz
LM317T	1.5	1.2	37		-	3.5	-	-	65	-	
LM7805K	1.5	4.65	5.35	I _o =5mA to1A,P _o <15W,V _i =8to20V	-	-	6	68	-	-	V _i =8to18V, f=120Hz
LM7806K	1.5	5.65	6.35	I _o =5mA to1A,P _o <15W,V _i =9to21V	-	-	6	65	-	-	V _i =9to19V, f=120Hz
LM7808K	1.5	7.6	8.4	I _o =5mA to1A,P _o <15W,V _i =11.5to23V	-	-	6	62	-	-	V _i =11.5to21.5V, f=120Hz
LM7809K	1.5	8.55	9.45	I _o =5mA to1A,P _o <15W,V _i =11.5to26V	-	-	6	55	-	-	V _i =12to23V, f=120Hz
LM7812K	1.5	11.4	12.6	I _o =5mA to1A,P _o <15W,V _i =15.5to27V	-	-	-	60	-	-	V _i =18.5to28.5V, f=120Hz
LM7815K	1.5	14.5	15.6	I _o =5mA to1A,P _o <15W,V _i =17.5to30V	-	-	8	54	-	-	V _i =18.5to28.5V, f=120Hz
LM7818K	1.5	17.1	18.9	I _o =5mA to1A,P _o <15W,V _i =23to35V	-	-	8	52	-	-	V _i =24to35V, f=120Hz
LM7824K	1.5	22.8	25.2	I _o =5mA to1A,P _o <15W,V _i =27to38V	-	-	8	50	-	-	V _i =28to38V, f=120Hz
LM317K	1.5	1.2	37		-	3.5	-	-	65	-	f=120Hz

二. 1.5A 负电压稳压电路

产品型号 Part No.	I _o (A)	V _o (V)		V _o 测试条件	I _q (mA)			RR(dB)			RR 测试条件
		Min.	Max.		Min.	Typ.	Max.	Min.	Typ.	Max.	
LM7905T	1.5	-4.75	-5.25	I _o =-5mA to-1A,P _o ≤15W,Vi=8to20V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM7906T	1.5	-5.7	-6.3	I _o =-5mA to-1A,P _o ≤15W,Vi=-9.5to-21.5V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM7909T	1.5	-8.6	-9.4	I _o =-5mA to-1A,P _o ≤15W,Vi=-11.5to-23V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM7912T	1.5	-11.4	-12.6	I _o =-5mA to-1A,P _o ≤15W,Vi=-15.5to-27V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM7915T	1.5	-14.3	-15.7	I _o =-5mA to-1A,P _o ≤15W,Vi=-18.5to-30V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM7918T	1.5	-17.1	-18.9	I _o =-5mA to-1A,P _o ≤15W,Vi=-22to-33V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM7924T	1.5	-22.8	-25.2	I _o =-5mA to-1A,P _o ≤15W,Vi=-27to-38V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM337T	1.5	-1.22	37		-	-	-	66	77	-	V _o =-10v,f=120HZ
LM7905K	1.5	-4.75	-5.25	I _o =-5mA to-1A,P _o ≤15W,Vi=8to20V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM7906K	1.5	-5.7	-6.3	I _o =-5mA to-1A,P _o ≤15W,Vi=-9.5to-21.5V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM7909K	1.5	-8.6	-9.4	I _o =-5mA to-1A,P _o ≤15W,Vi=-11.5to-23V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM7912K	1.5	-11.4	-12.6	I _o =-5mA to-1A,P _o ≤15W,Vi=-15.5to-27V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM7915K	1.5	-14.3	-15.7	I _o =-5mA to-1A,P _o ≤15W,Vi=-18.5to-30V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM7918K	1.5	-17.1	-18.9	I _o =-5mA to-1A,P _o ≤15W,Vi=-22to-33V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM7924K	1.5	-22.8	-25.2	I _o =-5mA to-1A,P _o ≤15W,Vi=-27to-38V	-	-	3	54	60	-	ΔVi=10V,f=120HZ
LM337K	1.5	-1.2	-37		-	-	-	66	77	-	V _o =-10v,f=120HZ

11、Super Junction MOSFET 产品列表

产品型号 Part No.	极性 Polarity	V _{DSS} (V)	I _D (A)	P _{tot} (W)	V _{GS} (V)	R _{DS(on)} (mΩ)TYP.	V _{th} (V)		封装 Package	可替换产品 Cross Reference
			T _C =25°C			@V _{GS} 10V	Min.	Max.		
TH80R250F	N-Channel	800	18	34	±30	250	2.5	4.5	TO-220F	

12、标准功率二极管产品列表

产品型号 Part No.	number of diodes	I _F (A)	V _{RRM} (V)	V _F (V)	I _{FSM} (A)	T _J	Package	可替换产品 Cross Reference
THD100P200K	1	100	2000	1.25	-	150°C	TO-247-2L	

13、雪崩晶体管产品列表

产品型号 Part No.	极性 Polarity	BV _{CBO} (V)	BV _{CEO} (V)	I _C (A)	P _C (W)	HFE				V _{CE} (sat)(V)			封装 Package	可替换产品 Cross Reference
						Min.	Max.	I _C (mA)	V _{CE} (V)	Max.	I _C (mA)	I _B (mA)		
TH415	NPN	260	100	0.5	1	25	400	10	10	0.5	10	1	SOT-23	

14、标准型单向可控硅产品列表

产品型号 Part No.	$V_{DRM}(V)$	$I_{T(RMS)}(A)$	$I_{GT}(mA)$	$V_T(V)$	$I_{(TSM)}(A)$	T_J	Package	可替换产品 Cross Reference
BCB75-1600KH	1600	75	30~80	1.40	750	150°C	TO-247H	
BCB125-1600KP	1600	125	30~80	1.45	1250	150°C	TO-247P	

15、碳化硅二极管产品列表

产品型号 Part No.	$V_{RRM}(V)$	$I_F(A)$	$I_{FSM}(A)$	$V_F(V)@I_F=10A, T_J=25^{\circ}C$	$I_R(\mu A)@25^{\circ}C, V_R=V_R \text{ Rated}$	$I_R(\mu A)@125^{\circ}C, V_R=V_R \text{ Rated}$	封装 Package	可替换产品 Cross Reference
THS10C65SAC2	650	10	70	1.32	0.06	2.48	TO-220C-2L(Ins)	
THS15C65SN	650	15	76	1.43	0.05	1.45	TO-263	
THS15C65SC2	650	15	76	1.43	0.05	1.45	TO-220C-2L	
THS20C65DKH	650	20	70	1.32	0.06	0.41	TO-247H	
THS20C65SAC2	650	20	134	1.37	0.03	0.16	TO-220C-2L(Ins)	
THS30C65SN	650	30	147	1.42	0.01	-	TO-263	
THS30C65SC2	650	30	147	1.42	0.01	-	TO-220C-2L	
THS30C65SK2	650	30	147	1.42	0.01	-	TO-247-2L	
THS15C120SK2	1200	15	135	1.55	5	-	TO-247-2L	
THS20C120SKH2	1200	20	136	1.4	0.79	5.5	TO-247H-2L	

16、SiC MOSFET 产品列表

产品型号 Part No.	极性 Polarity	V _{DSS} (V)	I _D (A)	R _{DS(on)} (mΩ)TYP.	V _{th} (V)		封装 Package	可替换产品 Cross Reference
			T _C =25°C	@V _{GS} 10V	Min.	Max.		
TH120R160K4	N-Channel	1200	26	160	2.0	4.0	TO-247-4L	
TH120R080K4	N-Channel	1200	42	80	2.0	4.0	TO-247-4L	
TH120R040K4	N-Channel	1200	74	40	2.0	4.0	TO-247-4L	
TH120R016K4	N-Channel	1200	150	16	2.0	4.0	TO-247-4L	
TH120R013K4	N-Channel	1200	175	13	2.0	4.0	TO-247-4L	