

Regulator Circuit Back

Product Series

Regulator Circuit Back

126-127

Regulator Circuit Back

Type Number	Continuous Total Dissipation	Maximum Otput Current	Input Voltage	Line Regulation	Output Voltage	Quiescent Current	Package
	PD	IO	Vi	VIROC		Max	
	W	MA	V	V	V	MA	
RL431K	300	100	-	-	2.445~2.545	-	SOT-23
CD431	300	100	-	-	2.45~2.55	-	SOT-23
LM317	2000	1000	40	-	-	-	TO-220-3L
RL431A	770	100	-	-	2.45~2.55	-	TO-92
RL431B	500	100	-	-	2.45~2.55	-	SOT-89-3L
RL431C	350	100	-	-	2.45~2.55	-	SOT-23-3L
RL431K	770	100	-	-	2.445~2.545	-	TO-92
RL432A	500	100	-	-	1.2214~1.2586	-	TO-92
RL432B	350	100	-	-	1.2214~1.2586	-	SOT-23
RL7805	1500	1500	35	7~25	4.8~5.2	8	TO-220-3L
RL7806	1500	1500	35	8~25	5.75~6.25	8	TO-220-3L
RL7808	1500	1500	35	10.5~25	7.7~8.3	8	TO-220-3L
RL7809	1500	1500	35	11.5~27	8.65~9.35	8	TO-220-3L
RL7812	1500	1500	40	14.5~30	11.5~12.5	8	TO-220-3L
RL7815	1500	1500	35	17.5~30	14.4~15.6	8	TO-220-3L
RL78D05	1250	1000	35	7.5~20	4.8~5.2	8	TO-252-2L(4R)
RL78L05A	500	100	30	7~20	4.8~5.2	6	SOT-89-3L
RL78L06A	500	100	30	8~20	5.75~6.25	6	SOT-89-3L
RL78L08A	500	100	30	10.5~23	7.7~8.3	6	SOT-89-3L
RL78L09A	500	100	30	11.5~24	8.64~9.36	6	SOT-89-3L
RL78L12A	500	100	35	14.5~27	11.5~12.5	6.5	SOT-89-3L
RL78L15A	500	100	35	17.5~30	14.4~15.6	6.5	SOT-89-3L
RL78L18A	500	100	35	20.5~33	17.3~18.7	6.5	SOT-89-3L
RL78L05B	625	100	30	7~20	4.8~5.2	6	TO-92
RL78L06B	625	100	30	8~20	5.75~6.25	6	TO-92
RL78L08B	625	100	30	10.5~23	7.7~8.3	6	TO-92
RL78L09B	625	100	30	11.5~24	8.64~9.36	6	TO-92
RL78L12B	625	100	35	14.5~27	11.5~12.5	6.5	TO-92
RL78L15B	625	100	35	17.5~30	14.4~15.6	6.5	TO-92
RL78L18B	625	100	35	20.5~33	17.3~18.7	6.5	TO-92
RL78M05A	500	500	25	7~25	4.8~5.2	6	SOT-89-3L
RL78M05B	1500	500	25	7~25	4.8~5.2	6	TO-220-3L
RL78M06B	1500	500	25	8~25	5.75~6.25	6	TO-220-3L
RL78M08B	1500	500	25	10.5~25	7.7~8.3	6	TO-220-3L
RL78M09B	1500	500	25	11.5~26	8.65~9.35	6	TO-220-3L
RL78M12B	1500	500	25	14.5~30	11.5~12.5	6	TO-220-3L
RL78M05C	1250	500	25	7~25	4.8~5.2	6	TO-251-3L(4R)
RL78M06C	1250	500	25	8~25	5.75~6.25	6	TO-251-3L(4R)
RL78M08C	1250	500	25	10.5~25	7.7~8.3	6	TO-251-3L(4R)
RL78M09C	1250	500	25	11.5~26	8.65~9.35	6	TO-251-3L(4R)
RL78M12C	1250	500	25	14.5~30	11.5~12.5	6	TO-251-3L(4R)
RL78M05D	1250	500	25	7~25	4.8~5.2	6	TO-252-2L(4R)
RL78M06D	1250	500	25	8~25	5.75~6.25	6	TO-252-2L(4R)
RL78M08D	1250	500	25	10.5~25	7.7~8.3	6	TO-252-2L(4R)
RL78M09D	1250	500	25	11.5~26	8.65~9.35	6	TO-252-2L(4R)
RL78M12D	1250	500	25	14.5~30	11.5~12.5	6	TO-252-2L(4R)
RL78M15D	1250	500	35	17.5~30	14.4~15.6	6	TO-252-2L(4R)
RL7905	1500	1500	-25	-7~-25	-4.8~-5.2	2	TO-220-3L
RL7906	1500	1500	-25	-8~-25	-5.75~-6.25	2	TO-220-3L
RL7908	1500	1500	-25	-10.5~-25	-7.7~-8.3	2	TO-220-3L
RL7909	1500	1500	-25	-14.5~-30	-8.65~-9.35	2	TO-220-3L
RL7912	1500	1500	-30	-14.5~-30	-11.5~-12.5	3	TO-220-3L
RL7915	1500	1500	-35	-17.5~-30	-14.4~-15.6	3	TO-220-3L
RL7908	1250	1500	-25	-10.5~-25	-7.7~-8.3	2	TO-252-2L(4R)
RL7912	1250	1500	-30	-14.5~-30	-11.5~-12.5	3	TO-252-2L(4R)
RL7915F	1500	1500	-35	-17.5~-30	-14.4~-15.6	3	TO-220F

Transistors Series

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Regulator Circuit Back

Type Number	Continuous Total Dissipation	Maximum Output Current	Input Voltage	Line Regulation	Output Voltage	Quiescent Current	Package
	PD	IO	Vi	VIROC		Max	
	W	MA	V	V	V	MA	
RL79L06T	350	100	-30	-8~-20	-5.75~-6.25	6	SOT-23-3L
RL79L08T	350	100	-30	-10.5~-23	-7.7~-8.3	6	SOT-23-3L
RL79L09T	350	100	-30	-12~-24	-8.64~9.36	6	SOT-23-3L
RL79L12T	350	100	-35	-14.5~-27	-11.5~-12.5	6.5	SOT-23-3L
RL79L05C	625	100	-30	-7~-20	-4.8~-5.2	6	TO-92
RL79L06C	625	100	-30	-8~-20	-5.75~-6.25	6	TO-92
RL79L08C	625	100	-30	-10.5~-23	-7.7~-8.3	6	TO-92
RL79L09C	625	100	-30	-12~-24	-8.64~9.36	6	TO-92
RL79L12C	625	100	-35	-14.5~-27	-11.5~-12.5	6.5	TO-92
RL79L05A	500	100	-30	-7~-20	-4.8~-5.2	6	SOT-89-3L
RL79L06A	500	100	-30	-8~-20	-5.75~-6.25	6	SOT-89-3L
RL79L08A	500	100	-30	-10.5~-23	-7.7~-8.3	6	SOT-89-3L
RL79L09A	500	100	-30	-12~-24	-8.64~9.36	6	SOT-89-3L
RL79L12A	500	100	-35	-14.5~-27	-11.5~-12.5	6.5	SOT-89-3L
RLA1117-1.5	500	1000	17	3~10	1.485~1.515	10	SOT-89-3L
RLA1117-1.8	500	1000	17	3.2~10	1.782~1.818	10	SOT-89-3L
RLA1117-2.5	500	1000	17	3.9~10	2.475~2.525	10	SOT-89-3L
RLA1117-3.3	500	1000	17	4.75~10	3.267~3.333	10	SOT-89-3L
RLA1117-5	500	1000	17	6.5~12	4.95~5.05	10	SOT-89-3L
RLA1117-ADJ	500	1000	17	-	1.238~1.262	-	SOT-89-3L
RLA1117B-1.8	500	1000	20	3.3~12	1.773~1.827	10	SOT-89-3L
RLA1117B-2.5	500	1000	20	4~12	2.463~2.538	10	SOT-89-3L
RLA1117B-3.3	500	1000	20	4.8~12	3.251~3.350	10	SOT-89-3L
RLA1117B-5	500	1000	20	6.5~12	4.925~5.075	10	SOT-89-3L
RLA1117B-ADJ	500	1000	20	-	1.231~1.269	10	SOT-89-3L
RLB1117-1.5	2000	1000	17	3~10	1.485~1.515	10	TO-263-3L
RLB1117-1.8	2000	1000	17	3.2~10	1.782~1.818	10	TO-263-3L
RLB1117-2.5	2000	1000	17	3.9~10	2.475~2.525	10	TO-263-3L
RLB1117-3.3	2000	1000	17	4.75~10	3.267~3.333	10	TO-263-3L
RLB1117-5	2000	1000	17	6.5~12	4.95~5.05	10	TO-263-3L
RLB1117-ADJ	2000	1000	17	-	1.238~1.262	-	TO-263-3L
RLP1117-1.5	2000	1000	17	3~10	1.485~1.515	10	TO-220-3L
RLP1117-1.8	2000	1000	17	3.2~10	1.782~1.818	10	TO-220-3L
RLP1117-2.5	2000	1000	17	3.9~10	2.475~2.525	10	TO-220-3L
RLP1117-3.3	2000	1000	17	4.75~10	3.267~3.333	10	TO-220-3L
RLP1117-5	2000	1000	17	6.5~12	4.95~5.05	10	TO-220-3L
RLP1117-ADJ	2000	1000	17	-	4.950~5.050	10	TO-220-3L
RLT1117-1.5	1250	1000	17	3~10	1.485~1.515	10	SOT-223
RLT1117-1.8	1250	1000	17	3.2~10	1.782~1.818	10	SOT-223
RLT1117-2.5	1250	1000	17	3.9~10	2.475~2.525	10	SOT-223
RLT1117-3.3	1250	1000	17	4.75~10	3.267~3.333	10	SOT-223
RLT1117-5	1250	1000	17	6.5~12	4.95~5.05	10	SOT-323
RLT1117-ADJ	1250	1000	17	-	1.238~1.262	-	SOT-223
RLU1117-1.5	1250	1000	17	3~10	1.485~1.515	10	TO-252-2L(4R)
RLU1117-1.8	1250	1000	17	3.2~10	1.782~1.818	10	TO-252-2L(4R)
RLU1117-2.5	1250	1000	17	3.9~10	2.475~2.525	10	TO-252-2L(4R)
RLU1117-3.3	1250	1000	17	4.75~10	3.267~3.333	10	TO-252-2L(4R)
RLU1117-5	1250	1000	17	6.5~12	4.95~5.05	10	TO-252-2L(4R)
RLU1117-ADJ	1250	1000	17	-	1.238~1.262	-	TO-252-2L(4R)



General Purpose Transistors

Product Series	
General Purpose Transistors	130-135

General Purpose Transistors

Type Number	Collector Power Dissipation	Collector Current	Collector-Base Voltage	Collector-Emitter Voltage	Emitter-Base Voltage	DC current gain		Collector-Emitter Saturation Voltage	Transition Frequency	Polarity	Package
	Pcm	Ic	BVcbo	BVceo	BVebo			Vce(sat)	fT		
	mW	mA	V	V	V	Min	Max	V	MHz		
2PD601AW	200	100	60	50	6	160	460	0.5	100	NPN	SOT-323
2SA1576A	200	150	60	50	6	120	560	0.5	140+	PNP	SOT-323
2SA1577	200	500	40	32	5	82	390	0.4	200+	PNP	SOT-323
2SA1579	100	50	120	120	5	180	560	0.5	140+	PNP	SOT-323
2SA1586	100	150	50	50	5	70	400	0.3	80	PNP	SOT-323
2SA1611	150	100	60	50	5	90	600	0.3	180+	PNP	SOT-323
2SB1218A	150	100	45	45	7	160	460	0.5	80+	PNP	SOT-323
2SB1694	200	1000	30	30	6	270	680	0.38	320	PNP	SOT-323
2SC1623	200	100	60	50	5	90	600	0.3	250+	NPN	SOT-323
2SC3930	150	30	30	20	5	70	220	-	150	NPN	SOT-323
2SC4081	200	150	60	50	7	120	560	0.4	180+	NPN	SOT-323
2SC4097	200	500	40	32	5	82	390	0.4	250+	NPN	SOT-323
2SC4098	200	50	40	25	5	56	270	0.3	150	NPN	SOT-323
2SC4102	200	50	120	120	5	180	560	0.5	140+	NPN	SOT-323
2SC4116	100	150	60	50	5	70	700	0.25	80	NPN	SOT-323
2SC4177	150	100	60	50	5	90	600	0.3	250	NPN	SOT-323
2SC4180	150	50	120	120	5	135	900	0.3	50	NPN	SOT-323
2SC4215	100	20	40	30	4	40	200	-	260	NPN	SOT-323
2SD1819A	150	100	60	50	7	160	460	0.3	150+	NPN	SOT-323
BC807W	200	500	50	45	5	100	600	0.7	80	PNP	SOT-323
BC817W	200	500	50	45	5	100	600	0.7	100	NPN	SOT-323
BC846W	150	100	80	65	6	110	450	0.6	100	NPN	SOT-323
BC847W	150	100	50	45	6	110	800	0.6	100	NPN	SOT-323
BC848W	150	100	30	30	5	110	800	0.6	100	NPN	SOT-323
BC856W	150	100	80	65	5	125	475	0.65	100	PNP	SOT-323
BC857W	150	100	50	45	5	125	800	0.65	100	PNP	SOT-323
BC858W	150	100	30	30	5	125	800	0.65	100	PNP	SOT-323
KTA2014	100	150	50	50	5	70	400	0.3	80	PNP	SOT-323
KTA2015	100	500	35	30	5	70	240	0.25	200+	PNP	SOT-323
KTC4076	100	500	35	30	5	70	240	0.25	300+	NPN	SOT-323
KTC4077	100	100	120	120	5	200	700	0.3	100+	NPN	SOT-323
MMST2222A	200	600	75	40	6	100	300	1	300	NPN	SOT-323
MMST2907A	200	600	60	60	5	100	300	1.6	200	PNP	SOT-323
MMST3904	200	200	60	40	5	100	300	0.3	300	NPN	SOT-323
MMST3906	200	200	40	40	5	100	300	0.3	250	PNP	SOT-323
MMST4401	200	600	60	40	6	100	300	0.75	250	NPN	SOT-323
MMST4403	200	600	40	40	5	100	300	0.75	200	PNP	SOT-323
MMST5401	200	600	160	150	5	60	300	0.5	100	PNP	SOT-323
MMST5551	200	600	180	160	6	80	300	0.2	100	NPN	SOT-323
MMSTA42	200	200	300	300	5	100	200	0.2	50	NPN	SOT-323
MMSTA56	200	500	80	80	4	50	-	0.25	50	PNP	SOT-323
MMSTA92	200	200	310	305	5	100	200	0.2	50	PNP	SOT-323
S9012W	200	500	40	25	5	120	400	0.6	150	PNP	SOT-323
S9013W	200	500	40	25	5	120	400	0.6	150	NPN	SOT-323
S9014W	200	100	50	45	5	200	1000	0.3	150	NPN	SOT-323
S9015W	200	100	50	45	5	200	1000	0.3	150	PNP	SOT-323
S9018W	200	50	30	15	5	70	190	0.5	600	NPN	SOT-323
SS8050	250	1500	40	25	5	120	400	0.5	100	NPN	SOT-323
SS8550	200	1500	40	25	5	120	400	0.5	100	PNP	SOT-323
ZUMT491	250	1000	80	60	5	100	300	0.5	150	NPN	SOT-323

General Purpose Transistors

Type Number	Collector Power Dissipation	Collector Current	Collector-Base Voltage	Collector-Emitter Voltage	Emitter-Base Voltage	DC current gain		Collector-Emitter Saturation Voltage	Transition Frequency	Polarity	Package
	Pcm	Ic	BVcbo	BVceo	BVebo			Vce(sat)	fT		
	mW	mA	V	V	V	Min	Max	V	MHz		
MMBT3904SL	100	200	60	40	6	100	300	0.3	300	NPN	SOT-923
2SA2029	150	150	60	50	6	120	560	0.5	140	PNP	SOT-723
2SC5658	100	150	60	50	7	120	560	0.4	180+	NPN	SOT-723
2SA1774	150	150	60	50	6	120	560	0.5	140+	PNP	SOT-523
2SA1832	100	150	50	50	5	120	400	0.3	80	PNP	SOT-523
2SA2018	150	500	15	12	6	270	680	0.25	260+	PNP	SOT-523
2SC4617	150	150	60	50	7	120	560	0.4	180+	NPN	SOT-523
2SC4618	150	50	40	25	5	56	270	0.3	150	NPN	SOT-523
2SC4738	100	150	60	50	5	120	700	0.25	80	NPN	SOT-523
2SC5585	150	500	15	12	6	270	680	0.25	320+	NPN	SOT-523
BC847T	150	100	50	45	6	110	800	0.6	100	NPN	SOT-523
BC857T	150	100	50	45	6	125	800	0.65	100	PNP	SOT-523
MMBT2222AT	150	600	75	40	6	35	-	1	300	NPN	SOT-523
MMBT3904T	150	200	60	40	6	100	300	0.3	300	NPN	SOT-523
MMBT3906T	150	200	40	40	5	100	300	0.4	250	PNP	SOT-523
2PD601AW	200	100	60	50	6	160	460	0.5	100	NPN	SOT-223
B772	1250	3000	40	30	6	60	400	0.5	50	PNP	SOT-223
BCP51	1500	1000	45	45	5	63	250	0.5	100	PNP	SOT-223
BCP52	1500	1000	60	60	5	63	250	0.5	100	PNP	SOT-223
BCP53	1500	1000	100	80	5	63	250	0.5	100	PNP	SOT-223
BCP54	1500	1000	45	45	5	63	250	0.5	100	NPN	SOT-223
BCP55	1500	1000	60	60	5	63	250	0.5	100	NPN	SOT-223
BCP56	1500	1000	100	80	5	63	250	0.5	100	NPN	SOT-223
BCP68	1000	1000	32	20	5	85	375	0.5	40	NPN	SOT-223
BCP69	1000	1000	32	20	5	85	375	0.5	40	PNP	SOT-223
CZT2955	1000	6000	100	60	7	20	70	1.1	2.5	PNP	SOT-223
CZT3055	1000	6000	100	60	7	20	70	1.1	2.5	NPN	SOT-223
CZT31C	1000	3000	100	100	5	10	100	1.2	3	NPN	SOT-223
CZT32C	1000	3000	100	100	5	10	100	1.2	3	PNP	SOT-223
CZT5401	1000	600	160	150	5	60	300	0.5	100	PNP	SOT-223
CZT5551	1000	600	180	160	6	80	250	0.2	100	NPN	SOT-223
D882	1500	3000	40	30	6	60	400	0.5	50	NPN	SOT-223
PZT2222A	1000	600	75	40	6	100	300	1	300	NPN	SOT-223
PZT2907A	1000	600	60	60	5	100	300	1.6	200	PNP	SOT-223
PZT3904	1000	200	60	40	6	100	300	0.2	300	NPN	SOT-223
PZT3906	1000	200	40	40	5	100	300	0.4	250	PNP	SOT-223
PZT4401	1000	600	60	40	6	100	300	0.75	250	NPN	SOT-223
PZT4403	1000	600	40	40	6	100	300	0.75	200	PNP	SOT-223
PZTA06	1000	500	80	80	4	100	-	0.25	100	NPN	SOT-223
PZTA42	1000	500	300	300	6	40	-	0.5	50	NPN	SOT-223
PZTA44	1000	300	500	400	6	50	200	0.75	20	NPN	SOT-223
PZTA56	1000	500	80	80	4	100	-	0.25	50	PNP	SOT-223
PZTA94	1000	200	400	400	5	80	300	0.3	50	PNP	SOT-223
2SA1036	200	500	40	32	5	82	390	0.4	200+	PNP	SOT-23
2SA1037	200	150	60	50	6	120	560	0.5	140+	PNP	SOT-23
2SA1162	150	150	50	50	5	70	400	0.3	80	PNP	SOT-23
2SA1179	200	150	55	50	5	200	400	0.5	180+	PNP	SOT-23
2SA1235A	200	200	60	50	6	150	500	0.3	200+	PNP	SOT-23
2SA1298	200	800	35	30	5	100	320	0.4	120+	PNP	SOT-23
2SA1313	200	500	50	50	5	70	240	0.25	200	PNP	SOT-23
2SA812	200	100	60	50	5	90	600	0.3	180+	PNP	SOT-23
2SB1116	350	1000	60	50	6	135	600	0.3	70	PNP	SOT-23
2SB1197	200	800	40	32	5	82	390	0.5	50	PNP	SOT-23
2SB624	200	700	30	25	5	110	400	0.6	160+	PNP	SOT-23
2SB709A	200	100	45	45	7	160	460	0.5	60	PNP	SOT-23
2SC1623	200	100	60	50	5	90	600	0.3	250+	NPN	SOT-23
2SC1654	150	50	180	160	5	90	400	0.3	120+	NPN	SOT-23

General Purpose Transistors

Type Number	Collector Power Dissipation	Collector Current	Collector-Base Voltage	Collector-Emitter Voltage	Emitter-Base Voltage	DC current gain		Collector-Emitter Saturation Voltage	Transition Frequency	Polarity	Package
	Pcm	Ic	BVcbo	BVceo	BVebo			Vce(sat)	fT		
	mW	mA	V	V	V	Min	Max	V	MHz		
2SC2411	200	500	40	32	5	82	390	0.4	250+	NPN	SOT-23
2SC2412	200	150	60	50	7	120	560	0.4	160+	NPN	SOT-23
2SC2712	150	150	60	50	5	70	700	0.25	80	NPN	SOT-23
2SC2714	100	20	40	30	4	40	200	-	550+	NPN	SOT-23
2SC2715	350	50	35	30	4	40	240	0.4	100	NPN	SOT-23
2SC2859	150	500	35	30	5	70	400	0.25	300+	NPN	SOT-23
2SC3052	150	200	50	50	6	150	800	0.3	180	NPN	SOT-23
2SC3437	150	200	40	15	5	40	240	0.3	200	NPN	SOT-23
2SC5343	200	150	60	50	5	70	700	0.25	80	NPN	SOT-23
2SC5344	200	800	35	30	5	100	320	0.5	120+	NPN	SOT-23
2SC5345	300	20	30	20	4	40	240	0.3	550+	NPN	SOT-23
2SD0602	200	500	30	25	5	85	340	0.6	200+	NPN	SOT-23
2SD0602A	200	500	60	50	5	85	340	0.6	200+	NPN	SOT-23
2SD1306	150	700	30	15	5	250	800	0.5	250+	NPN	SOT-23
2SD1757K	200	500	30	15	6.5	120	560	0.4	150+	NPN	SOT-23
2SD1781	200	800	40	32	5	120	390	0.4	150+	NPN	SOT-23
2SD1782	200	500	80	80	5	120	390	0.5	120+	NPN	SOT-23
2SD2114	250	500	25	20	12	820	2700	0.4	350+	NPN	SOT-23
2SD596	200	700	30	25	5	110	400	0.6	170	NPN	SOT-23
2SD602	200	500	30	25	5	85	340	0.6	200+	NPN	SOT-23
2SD602A	200	500	60	50	5	85	340	0.6	200+	NPN	SOT-23
3DK2222A	225	600	75	40	6	100	300	0.6	300	NPN	SOT-23
A1015	200	150	50	50	5	130	400	0.3	80	PNP	SOT-23
A733	200	150	60	50	5	120	475	0.3	50	PNP	SOT-23
BC807	300	500	50	45	5	100	600	0.7	100	PNP	SOT-23
BC808	300	800	30	25	5	100	630	0.7	100+	PNP	SOT-23
BC817	300	500	50	45	5	100	600	0.7	100	NPN	SOT-23
BC818	300	500	30	25	5	100	630	0.7	170+	NPN	SOT-23
BC846	200	100	80	65	6	110	450	0.5	100	NPN	SOT-23
BC847	200	100	50	45	6	110	800	0.5	100	NPN	SOT-23
BC848	200	100	30	30	6	110	800	0.5	100	NPN	SOT-23
BC849	200	100	30	30	5	110	800	0.6	200	NPN	SOT-23
BC856	200	100	80	65	5	125	475	0.5	100	PNP	SOT-23
BC857	200	100	50	45	5	125	800	0.5	100	PNP	SOT-23
BC858	200	100	30	30	5	125	800	0.5	100	PNP	SOT-23
BCW61	250	100	32	32	5	120	630	0.55	100	PNP	SOT-23
BCW66H	200	800	75	45	5	250	630	0.7	100	NPN	SOT-23
BCW68	330	800	60	45	5	100	630	0.7	200+	PNP	SOT-23
BCX19	225	500	50	45	5	100	600	0.62	-	NPN	SOT-23
BCX70J	250	200	45	45	5	250	460	0.55	100	NPN	SOT-23
BCX70K	250	200	45	45	5	380	630	0.55	100	NPN	SOT-23
BF820	250	50	300	300	5	50	-	0.6	60	NPN	SOT-23
BF821	250	50	300	300	5	50	-	0.8	60	PNP	SOT-23
BF822	250	50	250	250	5	50	-	0.6	60	NPN	SOT-23
BF823	250	50	250	250	5	50	-	0.8	60	PNP	SOT-23
BFS20	250	25	30	20	4	40	120	0.3	275	NPN	SOT-23
C1815	200	150	60	50	5	130	400	0.25	80	NPN	SOT-23
C945	200	150	60	50	5	130	400	0.3	150	NPN	SOT-23
CJ201NL	300	1000	30	20	5	280	-	0.25	100	NPN	SOT-23
FMMT4124	330	200	30	25	5	120	360	0.3	300	NPN	SOT-23
FMMT449	200	1000	50	30	5	100	300	1	150	NPN	SOT-23
FMMT491	250	1000	80	60	5	100	300	0.5	150	NPN	SOT-23
FMMT493	250	1000	120	100	5	100	300	0.6	150	NPN	SOT-23
FMMT591	250	1000	80	60	5	100	300	0.6	150	PNP	SOT-23
FMMT593	250	1000	120	100	5	100	300	0.3	50	PNP	SOT-23
FMMT619	350	2000	50	50	5	200	-	0.22	100	NPN	SOT-23

General Purpose Transistors

Type Number	Collector Power Dissipation	Collector Current	Collector-Base Voltage	Collector-Emitter Voltage	Emitter-Base Voltage	DC current gain		Collector-Emitter Saturation Voltage	Transition Frequency	Polarity	Package
	Pcm	Ic	BVcbo	BVceo	BVebo			Vce(sat)	fT		
	mW	mA	V	V	V	Min	Max	V	MHz		
KSA1182	150	500	35	30	5	70	240	0.25	200+	PNP	SOT-23
KST10	350	40	30	25	3	60	-	0.5	650	NPN	SOT-23
KTA1298	200	800	35	30	5	100	320	0.4	120+	PNP	SOT-23
KTA1504	150	150	50	50	5	70	400	0.3	80	PNP	SOT-23
KTA1505	150	500	35	30	5	70	400	0.25	200+	PNP	SOT-23
KTC3265	200	800	35	30	5	100	320	0.5	120+	NPN	SOT-23
KTC3875	150	150	60	50	5	70	700	0.25	80	NPN	SOT-23
KTC3876	200	500	35	30	5	70	400	0.25	300+	NPN	SOT-23
KTC3879	150	50	35	30	4	40	240	0.4	100	NPN	SOT-23
KTC4075	100	150	60	50	5	70	700	0.25	80	NPN	SOT-23
KTD1304	200	300	25	20	12	200	1000	0.25	60+	NPN	SOT-23
M28S	200	1000	40	20	6	300	1000	0.55	100	NPN	SOT-23
M8050	200	800	40	25	6	80	400	0.5	150	NPN	SOT-23
M8550	200	800	40	25	6	85	400	0.5	150	PNP	SOT-23
MMBT1616	750	1000	60	50	6	135	600	0.3	100	NPN	SOT-23
MMBT1616A	750	1000	120	60	6	135	600	0.3	100	NPN	SOT-23
MMBT2222	250	600	75	30	6	100	300	1	300	NPN	SOT-23
MMBT2222A	300	600	75	40	6	100	300	1	300	NPN	SOT-23
MMBT2907	250	600	60	40	5	100	300	0.67	200	PNP	SOT-23
MMBT2907A	250	600	60	60	5	100	300	1.6	200	PNP	SOT-23
MMBT3904	200	200	60	40	6	100	300	0.3	300	NPN	SOT-23
MMBT3906	200	200	40	40	5	100	300	0.3	300	PNP	SOT-23
MMBT4401	300	600	60	40	6	100	300	0.4	250	NPN	SOT-23
MMBT4403	300	600	40	40	5	100	300	0.4	200	PNP	SOT-23
MMBT5401	300	600	160	150	5	100	300	0.5	100	PNP	SOT-23
MMBT5550	225	600	160	140	6	60	250	0.25	-	NPN	SOT-23
MMBT5551	300	600	180	160	6	100	300	0.5	100	NPN	SOT-23
MMBT589	310	1000	50	30	5	100	300	0.65	100	PNP	SOT-23
MMBTA05	300	500	60	60	4	100	400	0.25	100	NPN	SOT-23
MMBTA06	300	500	80	80	4	100	400	0.25	100	NPN	SOT-23
MMBTA42	350	300	300	300	5	100	200	0.2	50	NPN	SOT-23
MMBTA43	350	500	200	200	5	40	-	0.5	50	NPN	SOT-23
MMBTA44	350	200	500	400	6	50	200	0.75	-	NPN	SOT-23
MMBTA55	225	500	60	60	4	100	400	0.25	50	PNP	SOT-23
MMBTA56	225	500	80	80	4	100	400	0.25	50	PNP	SOT-23
MMBTA92	300	300	300	300	5	100	200	0.2	50	PNP	SOT-23
MMBTA93	350	500	200	200	5	40	-	0.5	50	PNP	SOT-23
MMBTA94	350	200	400	400	5	80	300	0.3	50	PNP	SOT-23
MMBTH10	225	50	30	25	3	60	-	0.5	650	NPN	SOT-23
S8050	300	500	40	25	5	120	350	0.6	150	NPN	SOT-23
S8550	300	500	40	25	5	120	400	0.6	150	PNP	SOT-23
S9012	300	500	40	25	5	120	400	0.6	150	PNP	SOT-23
S9013	300	500	40	25	5	120	400	0.6	150	NPN	SOT-23
S9014	200	100	50	45	5	200	1000	0.3	150	NPN	SOT-23
S9015	200	100	50	45	5	200	1000	0.3	150	PNP	SOT-23
S9018	200	50	30	15	5	70	190	0.5	800+	NPN	SOT-23
SS8050	300	1500	40	25	5	120	400	0.5	100	NPN	SOT-23
SS8550	300	1500	40	25	5	120	400	0.5	100	PNP	SOT-23
STD123S	350	1000	20	15	6.5	150	-	0.3	260+	NPN	SOT-23

General Purpose Transistors

Type Number	Collector Power Dissipation	Collector Current	Collector-Base Voltage	Collector-Emitter Voltage	Emitter-Base Voltage	DC current gain		Collector-Emitter Saturation Voltage	Transition Frequency	Polarity	Package
	Pcm	Ic	BVcbo	BVceo	BVebo			Vce(sat)	fT		
	mW	mA	V	V	V	Min	Max	V	MHz		
A42	500	500	310	305	5	100	300	0.2	50	NPN	SOT-89-3L
A44	500	300	500	400	6	50	200	0.75	-	NPN	SOT-89-3L
A92	500	500	310	305	5	100	300	0.2	50	PNP	SOT-89-3L
A94	500	200	400	400	5	80	300	0.3	50	PNP	SOT-89-3L
B772	500	3000	40	30	5	60	400	0.5	80+	PNP	SOT-89-3L
BC868	500	1000	32	20	5	85	375	0.5	40	NPN	SOT-89-3L
BC869	500	1000	32	20	5	100	375	0.5	40	PNP	SOT-89-3L
BCX51	500	1000	45	45	5	63	250	0.5	50	PNP	SOT-89-3L
BCX52	500	1000	60	60	5	63	250	0.5	50	PNP	SOT-89-3L
BCX53	500	1000	100	80	5	63	250	0.5	50	PNP	SOT-89-3L
BCX54	500	1000	45	45	5	63	250	0.5	130	NPN	SOT-89-3L
BCX55	500	1000	60	60	5	63	250	0.5	130	NPN	SOT-89-3L
BCX56	500	1000	100	80	5	63	250	0.5	130	NPN	SOT-89-3L
BCX69	800	1000	25	20	5	85	375	0.5	100+	PNP	SOT-89-3L
BF620	500	50	300	300	5	50	-	0.6	60	NPN	SOT-89-3L
BF622	500	50	250	250	5	50	-	0.6	60	NPN	SOT-89-3L
BSR33	500	1000	90	80	5	100	300	0.5	100	PNP	SOT-89-3L
BSR43	500	1000	90	80	5	100	300	0.5	100	NPN	SOT-89-3L
BST39	500	100	400	350	5	40+	-	0.5	70	NPN	SOT-89-3L
BST40	500	100	300	250	5	40+	-	0.5	70	NPN	SOT-89-3L
CJ303PL	500	3000	30	30	6	100	300	0.4	-	PNP	SOT-89-3L
CJF715	500	1500	140	80	5	80	-	0.5	50+	NPN	SOT-89-3L
CXT5401	500	500	160	150	5	60	300	0.5	100	PNP	SOT-89-3L
CXT5551	500	600	180	160	6	80	300	0.2	100	NPN	SOT-89-3L
D882	500	3000	40	30	6	60	400	0.5	50	NPN	SOT-89-3L
FCX591	500	1000	80	60	5	100	300	0.6	150	PNP	SOT-89-3L
HM4033	500	1000	80	80	5	100	-	0.5	100	PNP	SOT-89-3L
HM879	500	3000	30	10	6	140	-	0.4	200+	NPN	SOT-89-3L
KTA1273	500	2000	30	30	5	100	320	2	120+	PNP	SOT-89-3L
KTA1663	500	1500	30	30	5	100	320	2	120+	PNP	SOT-89-3L
KTA1664	500	800	35	30	5	100	320	0.7	120+	PNP	SOT-89-3L
KTA1666	500	2000	50	50	5	70	240	0.5	120+	PNP	SOT-89-3L
KTA1668	500	1000	80	60	5	60	200	0.7	150+	PNP	SOT-89-3L
KTC3205	500	2000	30	30	5	100	320	2	120+	NPN	SOT-89-3L
KTC4372	500	50	200	150	5	70	240	0.5	120+	NPN	SOT-89-3L
KTC4373	500	800	120	120	5	80	240	1	120+	NPN	SOT-89-3L
KTC4374	500	400	80	80	5	70	240	0.4	100+	NPN	SOT-89-3L
KTC4375	500	1500	30	30	5	100	320	2	120+	NPN	SOT-89-3L
KTC4376	500	800	35	30	5	100	320	0.5	120+	NPN	SOT-89-3L
KTC4377	500	2000	30	10	6	140	600	0.5	150+	NPN	SOT-89-3L
KTC4378	500	1000	80	60	5	100	320	0.5	150+	NPN	SOT-89-3L
KTC4379	500	2000	50	50	5	70	240	0.5	120+	NPN	SOT-89-3L
KTD1302	500	300	25	20	12	200	800	0.25	60+	NPN	SOT-89-3L
KTD1898	500	1000	100	80	5	70	400	0.4	100+	NPN	SOT-89-3L
PXT2222A	500	600	75	40	6	100	300	1	300	NPN	SOT-89-3L
PXT2907A	500	600	60	60	5	100	300	1.6	200	PNP	SOT-89-3L
PXT3904	500	200	60	40	6	100	300	0.3	300	NPN	SOT-89-3L
PXT3906	500	200	40	40	6	100	300	0.4	250	PNP	SOT-89-3L
PXT8050	500	1500	40	25	5	85	400	0.5	100	NPN	SOT-89-3L
PXT8550	500	1500	40	25	5	85	400	0.5	100	PNP	SOT-89-3L

General Purpose Transistors

Type Number	Collector Power Dissipation	Collector Current	Collector-Base Voltage	Collector-Emitter Voltage	Emitter-Base Voltage	DC current gain		Collector-Emitter Saturation Voltage	Transition Frequency	Polarity	Package
	Pcm	Ic	BVcbo	BVceo	BVebo			Vce(sat)	fT		
	mW	mA	V	V	V	Min	Max	V	MHz		
2SA1013	500	1000	160	160	6	60	320	1.5	15	PNP	SOT-89-3L
2SA1201	500	800	120	120	5	80	240	1	120+	PNP	SOT-89-3L
2SA1203	500	1500	30	30	5	100	320	2	120+	PNP	SOT-89-3L
2SA1204	500	800	35	30	5	100	320	0.7	120+	PNP	SOT-89-3L
2SA1213	500	2000	50	50	5	70	240	0.5	100	PNP	SOT-89-3L
2SA1661	500	800	120	120	5	80	240	1	120+	PNP	SOT-89-3L
2SA1662	500	400	80	80	5	70	240	0.4	120+	PNP	SOT-89-3L
2SA1664	500	800	35	30	5	100	320	0.7	120+	PNP	SOT-89-3L
2SA1740	500	200	400	400	5	60	200	0.6	70+	PNP	SOT-89-3L
2SA1797	500	2000	50	50	6	82	270	0.35	200+	PNP	SOT-89-3L
2SB1073	500	4000	30	20	7	120	315	1	120+	PNP	SOT-89-3L
2SB1119	500	1000	25	25	5	100	560	0.7	180+	PNP	SOT-89-3L
2SB1132	500	1000	40	32	5	82	390	0.5	150+	PNP	SOT-89-3L
2SB1188	500	2000	40	32	5	82	390	0.8	100+	PNP	SOT-89-3L
2SB1189	500	700	80	80	5	82	390	0.4	100+	PNP	SOT-89-3L
2SB1260	500	1000	80	80	5	82	390	0.4	100+	PNP	SOT-89-3L
2SB1308	500	3000	30	20	6	82	390	0.45	120+	PNP	SOT-89-3L
2SB1386	500	5000	30	20	6	82	390	1	120+	PNP	SOT-89-3L
2SB1424	500	3000	20	20	6	120	390	0.5	240+	PNP	SOT-89-3L
2SB1440	500	2000	50	50	5	120	340	0.3	80+	PNP	SOT-89-3L
2SB766	500	1000	30	25	5	85	340	0.4	200+	PNP	SOT-89-3L
2SB766A	500	1000	60	50	5	85	340	0.4	200+	PNP	SOT-89-3L
2SC1766	500	2000	50	50	5	70	240	0.5	120+	NPN	SOT-89-3L
2SC2383	500	1000	160	160	6	100	320	1	20	NPN	SOT-89-3L
2SC2873	500	2000	50	50	5	70	240	0.5	120+	NPN	SOT-89-3L
2SC2881	500	800	120	120	5	80	240	1	120+	NPN	SOT-89-3L
2SC2883	500	1500	30	30	5	100	320	2	120+	NPN	SOT-89-3L
2SC2884	500	800	35	30	5	100	320	0.5	120+	NPN	SOT-89-3L
2SC3650	500	1200	30	25	15	800	3200	0.5	220+	NPN	SOT-89-3L
2SC4115	500	3000	40	20	6	120	560	0.5	290+	NPN	SOT-89-3L
2SC4373	500	800	120	120	5	80	240	1	120+	NPN	SOT-89-3L
2SC4374	500	400	80	80	5	70	240	0.4	100+	NPN	SOT-89-3L
2SC4375	500	1500	30	30	5	100	320	2	120+	NPN	SOT-89-3L
2SC4548	500	200	400	400	5	60	200	0.6	70+	NPN	SOT-89-3L
2SC4672	500	2000	60	50	6	82	390	0.35	210+	NPN	SOT-89-3L
2SC5785	500	2000	20	10	7	400	1000	0.12	-	NPN	SOT-89-3L
2SD1005	500	1000	100	80	5	90	400	0.5	160+	NPN	SOT-89-3L
2SD1119	500	3000	40	25	7	230	600	1	150+	NPN	SOT-89-3L
2SD1664	500	1000	40	32	5	82	390	0.4	150+	NPN	SOT-89-3L
2SD1766	500	2000	40	32	5	82	390	0.8	100+	NPN	SOT-89-3L
2SD1767	500	700	80	80	5	82	390	0.4	120+	NPN	SOT-89-3L
2SD1898	500	1000	100	80	5	82	390	0.4	100+	NPN	SOT-89-3L
2SD2098	500	5000	50	20	6	120	390	1	150+	NPN	SOT-89-3L
2SD2150	500	3000	40	20	6	180	560	0.5	290+	NPN	SOT-89-3L
2SD2153	500	2000	30	25	6	560	2700	0.5	110+	NPN	SOT-89-3L
2SD2391	500	2000	60	60	6	120	270	0.35	210+	NPN	SOT-89-3L
2SD2413	500	100	400	400	5	30	-	1.5	40+	NPN	SOT-89-3L
2SD874	500	1000	30	25	5	85	340	0.4	200+	NPN	SOT-89-3L
2SD874A	500	1000	60	50	5	85	340	0.4	200+	NPN	SOT-89-3L
2SD965	750	5000	40	20	7	230	800	1	150+	NPN	SOT-89-3L
2SD965A	750	5000	40	30	7	230	800	1	150+	NPN	SOT-89-3L
2SD999	500	1000	30	25	5	90	400	0.4	130+	NPN	SOT-89-3L
2SD1616A	500	1000	120	60	6	135	600	0.3	100	NPN	SOT-89-3L



Digital Transistor

Product Series

Digital Transistor

138-140

Digital Transistor

Type Number	Power Dissipation	Output Current	Supply Voltage	DC Current Gain	Output Voltage	Input Resistance	Resistance Ratio	Transition Frequency	Polarity	Package
	Pd	Ic	Vcc	GI	VO(on)	R1	R2	fT		
	mW	MA	V		V	Ω	Ω	MHz		
DTA113ZCA	200	100	50	33	0.3	1K+	10K+	250+	PNP	SOT-23
DTA114ECA	200	100	50	30	0.3	10K+	10K+	250+	PNP	SOT-23
DTA114TCA	200	100	50	100	0.3	10K+	infinity	250+	PNP	SOT-23
DTA114YCA	200	100	50	68	0.3	10K+	47K+	250+	PNP	SOT-23
DTA115TCA	200	100	50	100	0.3	100K+	infinity	250+	PNP	SOT-23
DTA123JCA	200	100	50	80	0.3	2.2K+	47K+	250+	PNP	SOT-23
DTA123YCA	200	100	50	33	0.3	2.2K+	10K+	250+	PNP	SOT-23
DTA124ECA	200	100	50	56	0.3	22K+	22K+	250+	PNP	SOT-23
DTA143ECA	200	100	50	30	0.3	4.7K+	4.7K+	250+	PNP	SOT-23
DTA143TCA	200	100	50	100	0.3	4.7K+	infinity	250+	PNP	SOT-23
DTA143XCA	200	100	50	30	0.3	4.7K+	10K+	250+	PNP	SOT-23
DTA143ZCA	200	100	50	80	0.3	4.7K+	47K+	250+	PNP	SOT-23
DTA144ECA	200	100	50	68	0.3	47K+	47K+	250+	PNP	SOT-23
DTA144TCA	200	100	50	100	0.3	47K+	infinity	250+	PNP	SOT-23
DTB113ZCA	200	500	50	56	0.3	1K+	10K+	200+	PNP	SOT-23
DTC113ZCA	200	100	50	33	0.3	1K+	10K+	250+	NPN	SOT-23
DTC114ECA	200	100	50	30	0.3	10K+	10K+	250+	NPN	SOT-23
DTC114TCA	200	100	50	100	0.3	10K+	infinity	250+	NPN	SOT-23
DTC114WCA	200	100	50	24	0.3	10K+	4.7K+	250+	NPN	SOT-23
DTC114YCA	200	100	50	68	0.3	10K+	47K+	250+	NPN	SOT-23
DTC123ECA	200	100	50	56	0.3	22K+	1K+	250+	NPN	SOT-23
DTC123JCA	200	100	50	80	0.3	2.2K+	47K+	250+	NPN	SOT-23
DTC123YCA	200	100	50	33	0.3	2.2K+	10K+	250+	NPN	SOT-23
DTC124ECA	200	100	50	56	0.3	22K+	22K+	250+	NPN	SOT-23
DTC143ECA	200	100	50	20	0.3	4.7K+	4.7K+	250+	NPN	SOT-23
DTC143TCA	200	100	50	100	0.3	4.7K+	infinity	250+	NPN	SOT-23
DTC143XCA	200	100	50	30	0.3	4.7K+	10K+	250+	NPN	SOT-23
DTC143ZCA	200	100	50	80	0.3	4.7K+	47K+	250+	NPN	SOT-23
DTC144ECA	200	100	50	68	0.3	47K+	47K+	250+	NPN	SOT-23
DTC144TCA	200	100	50	100	0.3	47K+	infinity	250+	NPN	SOT-23
DTA113ZKA	200	100	50	33	0.3	1K+	10K+	250+	PNP	SOT-23-3L
DTA114EKA	200	100	50	30	0.3	10K+	10K+	250+	PNP	SOT-23-3L
DTA114TKA	200	100	50	100	0.3	10K+	infinity	250+	PNP	SOT-23-3L
DTA114YKA	200	100	50	68	0.3	10K+	47K+	250+	PNP	SOT-23-3L
DTA115TKA	200	100	50	100	0.3	100K+	infinity	250+	PNP	SOT-23-3L
DTA123JKA	200	100	50	80	0.3	2.2K+	47K+	250+	PNP	SOT-23-3L
DTA123YKA	200	100	50	33	0.3	2.2K+	10K+	250+	PNP	SOT-23-3L
DTA124EKA	200	100	50	56	0.3	22K+	22K+	250+	PNP	SOT-23-3L
DTA143EKA	200	100	50	30	0.3	4.7K+	4.7K+	250+	PNP	SOT-23-3L
DTA143TKA	200	100	50	100	0.3	4.7K+	infinity	250+	PNP	SOT-23-3L
DTA143XKA	200	100	50	30	0.3	4.7K+	10K+	250+	PNP	SOT-23-3L
DTA143ZKA	200	100	50	80	0.3	4.7K+	47K+	250+	PNP	SOT-23-3L
DTA144EKA	200	100	50	68	0.3	47K+	47K+	250+	PNP	SOT-23-3L
DTA144TKA	200	100	50	100	0.3	47K+	infinity	250+	PNP	SOT-23-3L
DTC113ZKA	200	100	50	33	0.3	1K+	10K+	250+	NPN	SOT-23-3L
DTC114EKA	200	100	50	30	0.3	10K+	10K+	250+	NPN	SOT-23-3L
DTC114TKA	200	100	50	100	0.3	10K+	infinity	250+	NPN	SOT-23-3L
DTC114WKA	200	100	50	24	0.3	10K+	4.7K+	250+	NPN	SOT-23-3L
DTC114YKA	200	100	50	68	0.3	10K+	47K+	250+	NPN	SOT-23-3L
DTC123EKA	200	100	50	56	0.3	22K+	1K+	250+	NPN	SOT-23-3L
DTC123JKA	200	100	50	80	0.3	2.2K+	47K+	250+	NPN	SOT-23-3L
DTC123YKA	200	100	50	33	0.3	2.2K+	10K+	250+	NPN	SOT-23-3L
DTC124EKA	200	100	50	56	0.3	22K+	22K+	250+	NPN	SOT-23-3L
DTC143EKA	200	100	50	20	0.3	4.7K+	4.7K+	250+	NPN	SOT-23-3L
DTC143TKA	200	100	50	100	0.3	4.7K+	infinity	250+	NPN	SOT-23-3L
DTC143XKA	200	100	50	30	0.3	4.7K+	10K+	250+	NPN	SOT-23-3L
DTC143ZKA	200	100	50	80	0.3	4.7K+	47K+	250+	NPN	SOT-23-3L
DTC144EKA	200	100	50	68	0.3	47K+	47K+	250+	NPN	SOT-23-3L
DTC144TKA	200	100	50	100	0.3	47K+	infinity	250+	NPN	SOT-23-3L

Digital Transistor

Type Number	Power Dissipation	Output Current	Supply Voltage	DC Current Gain	Output Voltage	Input Resistance	Resistance Ratio	Transition Frequency	Polarity	Package
	Pd	Ic	Vcc	GI	VO(on)	R1	R2	fT		
	mW	MA	V		V	Ω	Ω	MHZ		
DTA113ZUA	200	100	50	33	0.3	1K+	10K+	250+	PNP	SOT-323
DTA114EUA	200	100	50	30	0.3	10K+	10K+	250+	PNP	SOT-323
DTA114TUA	200	100	50	100	0.3	10K+	infinity	250+	PNP	SOT-323
DTA114YUA	200	100	50	68	0.3	10K+	47K+	250+	PNP	SOT-323
DTA115TUA	200	100	50	100	0.3	100K+	infinity	250+	PNP	SOT-323
DTA123JUA	200	100	50	80	0.3	2.2K+	47K+	250+	PNP	SOT-323
DTA123YUA	200	100	50	33	0.3	2.2K+	10K+	250+	PNP	SOT-323
DTA124EUA	200	100	50	56	0.3	22K+	22K+	250+	PNP	SOT-323
DTA143EUA	200	100	50	30	0.3	4.7K+	4.7K+	250+	PNP	SOT-323
DTA143TUA	200	100	50	100	0.3	4.7K+	infinity	250+	PNP	SOT-323
DTA143XUA	200	100	50	30	0.3	4.7K+	10K+	250+	PNP	SOT-323
DTA143ZUA	200	100	50	80	0.3	4.7K+	47K+	250+	PNP	SOT-323
DTA144EUA	200	100	50	68	0.3	47K+	47K+	250+	PNP	SOT-323
DTA144TUA	200	100	50	100	0.3	47K+	infinity	250+	PNP	SOT-323
DTC113ZUA	200	100	50	33	0.3	1K+	10K+	250+	NPN	SOT-323
DTC114EUA	200	100	50	30	0.3	10K+	10K+	250+	NPN	SOT-323
DTC114TUA	200	100	50	100	0.3	10K+	infinity	250+	NPN	SOT-323
DTC114WUA	200	100	50	24	0.3	10K+	4.7K+	250+	NPN	SOT-323
DTC114YUA	200	100	50	68	0.3	10K+	47K+	250+	NPN	SOT-323
DTC123EUA	200	100	50	56	0.3	22K+	1K+	250+	NPN	SOT-323
DTC123JUA	200	100	50	80	0.3	2.2K+	47K+	250+	NPN	SOT-323
DTC123YUA	200	100	50	33	0.3	2.2K+	10K+	250+	NPN	SOT-323
DTC124EUA	200	100	50	56	0.3	22K+	22K+	250+	NPN	SOT-323
DTC143EUA	200	100	50	20	0.3	4.7K+	4.7K+	250+	NPN	SOT-323
DTC143TUA	200	100	50	100	0.3	4.7K+	infinity	250+	NPN	SOT-323
DTC143XUA	200	100	50	30	0.3	4.7K+	10K+	250+	NPN	SOT-323
DTC143ZUA	200	100	50	80	0.3	4.7K+	47K+	250+	NPN	SOT-323
DTC144EUA	200	100	50	68	0.3	47K+	47K+	250+	NPN	SOT-323
DTC144TUA	200	100	50	100	0.3	47K+	infinity	250+	NPN	SOT-323
DTD113ZUA	200	500	50	56	0.3	1K+	10K+	200+	NPN	SOT-323
DTA113ZE	150	100	50	33	0.3	1K+	10K+	250+	PNP	SOT-523
DTA114EE	150	100	50	30	0.3	10K+	10K+	250+	PNP	SOT-523
DTA114TE	150	100	50	100	0.3	10K+	infinity	250+	PNP	SOT-523
DTA114YE	150	100	50	68	0.3	10K+	47K+	250+	PNP	SOT-523
DTA115TE	150	100	50	10	0.3	100K+	infinity	250+	PNP	SOT-523
DTA123JE	150	100	50	80	0.3	2.2K+	47K+	250+	PNP	SOT-523
DTA123YE	150	100	50	33	0.3	2.2K+	10K+	250+	PNP	SOT-523
DTA124EE	150	100	50	56	0.3	22K+	22K+	250+	PNP	SOT-523
DTA143EE	150	100	50	30	0.3	4.7K+	4.7K+	250+	PNP	SOT-523
DTA143TE	150	100	50	100	0.3	4.7K+	infinity	250+	PNP	SOT-523
DTA143XE	150	100	50	30	0.3	4.7K+	10K+	250+	PNP	SOT-523
DTA143ZE	150	100	50	80	0.3	4.7K+	47K+	250+	PNP	SOT-523
DTA144EE	150	100	50	68	0.3	47K+	47K+	250+	PNP	SOT-523
DTA144TE	150	100	50	100	0.3	47K+	infinity	250+	PNP	SOT-523
DTC113ZE	150	100	50	33	0.3	1K+	10K+	250+	NPN	SOT-523
DTC114EE	150	100	50	30	0.3	10K+	10K+	250+	NPN	SOT-523
DTC114TE	150	100	50	100	0.3	10K+	infinity	250+	NPN	SOT-523
DTC114WE	150	100	50	24	0.3	10K+	4.7K+	250+	NPN	SOT-523
DTC114YE	150	100	50	68	0.3	10K+	47K+	250+	NPN	SOT-523
DTC115EE	150	100	50	82	0.3	100K+	100K+	250+	NPN	SOT-523
DTC123EE	150	100	50	56	0.3	22K+	1K+	250+	NPN	SOT-523
DTC123JE	150	100	50	80	0.3	2.2K+	47K+	250+	NPN	SOT-523
DTC123YE	150	100	50	33	0.3	2.2K+	10K+	250+	NPN	SOT-523
DTC124EE	150	100	50	56	0.3	22K+	22K+	250+	NPN	SOT-523
DTC143EE	150	100	50	20	0.3	4.7K+	4.7K+	250+	NPN	SOT-523
DTC143TE	150	100	50	100	0.3	4.7K+	infinity	250+	NPN	SOT-523
DTC143XE	150	100	50	30	0.3	4.7K+	10K+	250+	NPN	SOT-523
DTC143ZE	150	100	50	80	0.3	4.7K+	47K+	250+	NPN	SOT-523
DTC144EE	150	100	50	68	0.3	47K+	47K+	250+	NPN	SOT-523

Digital Transistor

Type Number	Power Dissipation	Output Current	Supply Voltage	DC Current Gain	Output Voltage	Input Resistance	Resistance Ratio	Transition Frequency	Polarity	Package
	Pd	Ic	Vcc	GI	VO(on)	R1	R2	fT		
	mW	MA	V		V	Ω	Ω	MHz		
DTA113ZM	100	100	50	33	0.3	1K+	10K+	250+	PNP	SOT-723
DTA114EM	100	100	50	30	0.3	10K+	10K+	250+	PNP	SOT-723
DTA114TM	100	100	50	100	0.3	10K+	infinity	250+	PNP	SOT-723
DTA114YM	100	100	50	68	0.3	10K+	47K+	250+	PNP	SOT-723
DTA115TM	100	100	50	100	0.3	100K+	infinity	250+	PNP	SOT-723
DTA123JM	100	100	50	80	0.3	2.2K+	47K+	250+	PNP	SOT-723
DTA123YM	100	100	50	33	0.3	2.2K+	10K+	250+	PNP	SOT-723
DTA124EM	100	100	50	56	0.3	22K+	22K+	250+	PNP	SOT-723
DTA143EM	100	100	50	30	0.3	4.7K+	4.7K+	250+	PNP	SOT-723
DTA143TM	100	100	50	100	0.3	4.7K+	infinity	250+	PNP	SOT-723
DTA143XM	100	100	50	30	0.3	4.7K+	10K+	250+	PNP	SOT-723
DTA143ZM	100	100	50	80	0.3	4.7K+	47K+	250+	PNP	SOT-723
DTA144EM	100	100	50	68	0.3	47K+	47K+	250+	PNP	SOT-723
DTA144TM	100	100	50	100	0.3	47K+	infinity	250+	PNP	SOT-723
DTC113ZM	100	100	50	33	0.3	1K+	10K+	250+	NPN	SOT-723
DTC114EM	100	100	50	30	0.3	10K+	10K+	250+	NPN	SOT-723
DTC114TM	100	100	50	100	0.3	10K+	infinity	250+	NPN	SOT-723
DTC114WM	100	100	50	24	0.3	10K+	4.7K+	250+	PNP	SOT-723
DTC114YM	100	100	50	68	0.3	10K+	47K+	250+	NPN	SOT-723
DTC115EM	100	100	50	82	0.3	100K+	100K+	250+	NPN	SOT-723
DTC123EM	100	100	50	56	0.3	22K+	1K+	250+	NPN	SOT-723
DTC123JM	100	100	50	80	0.3	2.2K+	47K+	250+	NPN	SOT-723
DTC123YM	100	100	50	33	0.3	2.2K+	10K+	250+	NPN	SOT-723
DTC124EM	100	100	50	56	0.3	22K+	22K+	250+	NPN	SOT-723
DTC143EM	100	100	50	20	0.3	4.7K+	4.7K+	250+	NPN	SOT-723
DTC143TM	100	100	50	100	0.3	4.7K+	infinity	250+	NPN	SOT-723
DTC143XM	100	100	50	30	0.3	4.7K+	10K+	250+	NPN	SOT-723
DTC143ZM	100	100	50	80	0.3	4.7K+	47K+	250+	NPN	SOT-723
DTC144EM	100	100	50	68	0.3	47K+	47K+	250+	NPN	SOT-723
DTC144TM	100	100	50	100	0.3	47K+	infinity	250+	NPN	SOT-723
DTA113ZSA	300	100	50	33	0.3	1K+	10K+	250+	PNP	SOT-92S
DTA114ESA	300	100	50	30	0.3	10K+	10K+	250+	PNP	SOT-92S
DTA114TSA	300	100	50	100	0.3	10K+	infinity	250+	PNP	SOT-92S
DTA114YSA	300	100	50	68	0.3	10K+	47K+	250+	PNP	SOT-92S
DTA123JSA	300	100	50	80	0.3	2.2K+	47K+	250+	PNP	SOT-92S
DTA123YSA	300	100	50	33	0.3	2.2K+	10K+	250+	PNP	SOT-92S
DTA124ESA	300	100	50	56	0.3	22K+	22K+	250+	PNP	SOT-92S
DTA143ESA	300	100	50	30	0.3	4.7K+	4.7K+	250+	PNP	SOT-92S
DTA143TSA	300	100	50	100	0.3	4.7K+	infinity	250+	PNP	SOT-92S
DTA143XSA	300	100	50	30	0.3	4.7K+	10K+	250+	PNP	SOT-92S
DTA143ZSA	300	100	50	80	0.3	4.7K+	47K+	250+	PNP	SOT-92S
DTA144ESA	300	100	50	68	0.3	47K+	47K+	250+	PNP	SOT-92S
DTA144TSA	300	100	50	100	0.3	47K+	infinity	250+	PNP	SOT-92S
DTC113ZSA	300	100	50	33	0.3	1K+	10K+	250+	NPN	SOT-92S
DTC114ESA	300	100	50	30	0.3	10K+	10K+	250+	NPN	SOT-92S
DTC114TSA	300	100	50	100	0.3	10K+	infinity	250+	NPN	SOT-92S
DTC114WSA	300	100	50	24	0.3	10K+	4.7K+	250+	NPN	SOT-92S
DTC114YSA	300	100	50	68	0.3	10K+	47K+	250+	NPN	SOT-92S
DTC123ESA	300	100	50	56	0.3	22K+	1K+	250+	NPN	SOT-92S
DTC123JSA	300	100	50	80	0.3	2.2K+	47K+	250+	NPN	SOT-92S
DTC123YSA	300	100	50	33	0.3	2.2K+	10K+	250+	NPN	SOT-92S
DTC124ESA	300	100	50	56	0.3	22K+	22K+	250+	NPN	SOT-92S
DTC143ESA	300	100	50	20	0.3	4.7K+	4.7K+	250+	NPN	SOT-92S
DTC143TSA	300	100	50	100	0.3	4.7K+	infinity	250+	NPN	SOT-92S
DTC143XSA	300	100	50	30	0.3	4.7K+	10K+	250+	NPN	SOT-92S
DTC143ZSA	300	100	50	80	0.3	4.7K+	47K+	250+	NPN	SOT-92S
DTC144ESA	300	100	50	68	0.3	47K+	47K+	250+	NPN	SOT-92S
DTC144TSA	300	100	50	100	0.3	47K+	infinity	250+	NPN	SOT-92S
DTA123YE	150	100	50	33	0.3	2.2K+	10K+	250+	PNP	SOT-92S

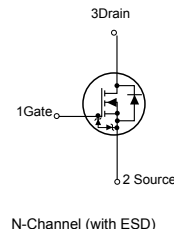
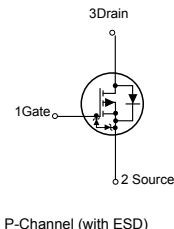
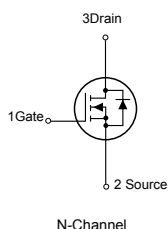
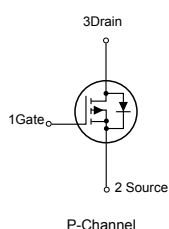
Transistors Series
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Mosfet

Product Series	
3 Pin Surface Mount Small Signal Mosfet	142
6 Pin Surface Mount Small Signal Mosfet	143
8 Pin Surface Mount Small Signal Mosfet	143
Low Voltage Power MOSFET N-Channel	144
High Voltage Power MOSFET N-Channel	144

3 Pin Surface Mount Small Signal Mosfet

Type Number	Drain Source Voltage	Drain Current	Static-Drain Source		Td(on)	Td(off)	Drain Source On Resistance			Package
	VDSS	ID	VGS(th)				RDS(on)	@VGS	@I	
	(V)	(A)	Min(V)	Max(V)	(ns)	(ns)	Max(mΩ)	(V)	(A)	
Small Signal Mosfet [N-Channel(with ESD)]										
NTK3043N	20	0.255	0.40	1.30	13.00	94.00	3400	4.5	0.01	SOT-723
NTA4001N	20	0.238	0.50	1.50	13.00	98.00	3000	4.5	0.01	SOT-523
SI1012X	20	0.500	0.45	0.90	5.00	25.00	700	4.5	0.6	SOT-523
NTA1003	20	0.5	0.45	0.9	5.00	25.00	700	4.5	0.6	SOT-523
NTA7002N	30	0.154	0.50	1.50	13.00	98.00	7000	4.5	0.154	SOT-523
2SK3018W	30	0.100	0.80	1.50	15.00	80.00	8000	4	0.01	SOT-323
NTA4409N	25	0.750	0.65	1.50	12.00	35.00	350	4.5	0.6	SOT-323
2N7002W	60	0.115	1.00	2.50	7.00	11.00	7500	10	0.5	SOT-323
SI1012	20	0.5	0.45	0.9	5.00	25.00	700	4.5	0.6	SOT-23
2SK3019	30	0.100	0.80	1.50	15.00	80.00	13000	2.5	0.001	SOT-23
NTR4003N	30	0.500	0.80	1.60	16.70	65.10	2000	2.5	0.01	SOT-23
BSS139	50	0.200	0.50	1.50	20.00	20.00	3500	5	0.2	SOT-23
2N7002	60	0.115	1.00	2.00	20.00	40.00	7500	10	0.5	SOT-23
2N7002K	60	0.320	1.00	2.50	9.90	39.40	1600	10	0.5	SOT-23
RK7002	60	0.115	1.00	2.50	20.00	30.00	7500	10	0.5	SOT-23
Small Signal Mosfet [P-Channel(with ESD)]										
XP152A	20	0.700	-	-	5.00	55.00	360	4.5	0.4	SOT-23
SI1013	20	0.35	0.45	-	5.00	35.00	1200	4.5	0.35	SOT-23
SI1013X	20	0.35	0.45	-	5.00	35.00	1200	4.5	0.35	SOT-523
P3515	20	4	0.3	1	965.2	7716	83	1.8	2.0	SOT-23
Small Signal Mosfet (P-Channel)										
BSS84W	50	0.130	0.80	2.00	2.50	16.00	10000	5	0.1	SOT-323
BSS84	50	0.130	0.80	2.00	2.50	16.00	10000	5	0.1	SOT-23
P2305DS	8	3.500	0.45	0.80	13.00	55.00	68	4.5	3.5	SOT-23
P2307	16	4.700	0.60	1.40	22.00	45.00	70	4.5	4.7	SOT-23
P2301	20	2.300	0.40	0.90	17.28	36.05	100	4.5	2.8	SOT-23
P2301A	20	2.000	0.40	1.00	50.00	40.00	110	4.5	2.8	SOT-23
P4101	20	2.300	0.45	0.95	17.28	36.05	150	2.5	2.0	SOT-23
P2305	30	4.200	0.70	1.30	11.36	34.88	130	2.5	1.0	SOT-23
P3401	30	4.200	0.70	1.30	6.30	38.20	120	2.5	1.0	SOT-23
P3407	30	4.1	1.0	3.0	7.5	19	70	10	4.1	SOT-23
P9435	30	5.300	1.00	3.00	9.00	75.00	70	10	5.3	SOT-23
Small Signal Mosfet (N-Channel)										
BSS138W	50	0.200	0.50	1.50	20.00	20.00	3500	5	0.2	SOT-323
BSS138	50	0.200	0.50	1.50	20.00	20.00	3500	5	0.2	SOT-23
2SK801	60	0.310	1.00	2.20	7.00	11.00	2500	10	0.5	SOT-23
BSS123	100	0.170	0.80	2.80	20.00	40.00	6000	10	0.1	SOT-23
N2302	20	2.300	0.60	1.20	6.16	16.61	60	4.5	2.8	SOT-23
N2302A	20	2.800	0.60	1.20	9.00	38.00	85	4.5	2.8	SOT-23
N4501	20	3.200	0.60	1.20	6.50	12.00	80	4.5	3.6	SOT-23
N2502	20	4.200	0.60	1.20	8.00	22.00	40	4.5	6.0	SOT-23
N2312	20	4.900	0.40	1.00	15.00	48.00	41	4.5	5.0	SOT-23
N2306	30	5.800	0.70	1.40	7.00	38.00	38	10	5.8	SOT-23
N4812	30	6.900	1.00	3.00	9.00	30.00	38	10	8.5	SOT-23



6 Pin Surface Mount Small Signal Mosfet

Type Number	Drain Source Voltage	Drain Current	Static-Drain Source		Td(on)	Td(off)	Drain Source On Resistance			Package
	VDSS	ID	VGS(th)				RDS(on)	@VGS	@I	
	(V)	(A)	Min(V)	Max(V)	(ns)	(ns)	Max(mΩ)	(V)	(A)	
6 Pin Surface Mount Small Signal Mosfet [Dual-N-Channel(with ESD)]										
2N7002DW	60	0.115	1.0	2.0	20	40	7500	10	0.5	SOT-363
2N7002DM	60	0.115	1.0	2.0	20	40	7500	10	0.5	SOT-457
6 Pin Surface Mount Small Signal Mosfet (MOSFET+ZENER)										
BSS138V3.3	50	0.200	0.5	1.5	20	20	3500	5	0.2	SOT-457
6 Pin Surface Mount Small Signal Mosfet (N-Channel/P-Channel)										
BSS8402DW	50	0.13	0.5	1.5	5	7	3500	5	0.2	SOT-363
6 Pin Surface Mount Small Signal Mosfet (P-Channel)										
BSS84DW	50	0.13	0.8	2	13	16	10000	5	0.1	SOT-363
6 Pin Surface Mount Small Signal Mosfet (N-Channel)										
BSS138DW	50	0.2	0.5	1.5	5	7	3500	5	0.2	SOT-363
8 Pin Surface Mount Small Signal Mosfet (N-Channel)										
DN9926E	20	6.0	0.5	1.5	8	22	30	4.5	6	SOP-8
8 Pin Surface Mount Small Signal Mosfet (P-Channel)										
O4459P	30	6.5	10	3.0	7.7	20	46	10	5.3	SOP-8
DP4803AE	30	5.3	1.0	3.0	8.3	29	60	10	5.3	SOP-8
DP9933E	20	3.6	0.6	1.4	22	45	60	4.5	4.7	SOP-8
P4411E	30	8.0	1.2	2.4	7.1	18.9	32	10.0	8.0	SOP-8
P9435E	30	5.3	1.0	3.0	19	74	60	10	5.3	SOP-8

Power MOSFET

Type Number	Drain Source Voltage	Drain Source Voltage	Drain Current	Maximum Power Dissipation	Static-Drain Source On Resistance	Gate Charge	Input Capacitance	Reverse Transfer Capacitance	Single Pulse Avalanche Energy	Package
	V _{DSS}	V _{GSS}	I _D	P _D	R _{dson(max.)}	Q _g	C _{iss}	C _{rss}	EAS	
	(V)	±(V)	(A)	(W)	(Ω)	nC	pF	pF	mJ	
Low Voltage Power MOSFET N-Channel										
04N03D	25	20	80	100	0.004	58.2	2950	430	140	TO-252/DPAK
06N03D	25	20	60	70	0.006	72	3750	500	400	TO-252/DPAK
09N03D	25	20	50	52	0.009	39	2100	300	180	TO-252/DPAK
B75N75	75	20	75	105	0.011	83	3150	240	660	TO-252/D ² PAK
P75N75	75	20	75	105	0.011	83	3150	240	660	TO-220AB
B24N10	100	20	42	105	0.024	78	1450	110	680	TO-263/D ² PAK
P24N10	100	20	42	89	0.024	78	3200	110	680	TO-220AB
F24N10	100	20	42	32	0.024	78	3200	110	680	ITO-220AB
High Voltage Power MOSFET N-Channel										
F730	400	30	5.5	50	0.95	16.8	560	6.2	303	ITO-220AB
P730	400	30	5.5	87	0.95	16.8	560	6.2	303	TO-220AB
F830	500	30	4.5	44	1.5	18.6	560	8.2	310	ITO-220AB
P830	500	30	4.5	87	1.5	18.6	560	8.2	310	TO-220AB
F840	500	30	8	45	0.9	31.5	1100	7.8	514	ITO-220AB
P840	500	30	8	125	0.9	31.5	1100	7.8	514	TO-220AB
F13N50	500	30	13	52	0.52	58.6	2000	16	780	ITO-220AB
P13N50	500	30	13	175	0.52	58.6	2000	16	780	TO-220AB
U1N60	600	30	1	28	11	6.2	165	1.6	58	TO-251AB
F2N60	600	30	2	20	4.6	9.3	320	3	120	ITO-220AB
PJP2N60	600	30	2	45	4.6	9.3	320	3	120	TO-220AB
F4N60	600	30	4	26	2.4	17.2	560	5.2	330	ITO-220AB
P4N60	600	30	4	70	2.4	17.2	560	5.2	330	TO-220AB
F5N60	600	30	5	44.6	2.1	22.5	712	6.8	350	ITO-220AB
P5N60	600	30	5	89	2.1	22.5	712	6.8	350	TO-220AB
F7N60	600	30	7	45	1.2	19.8	1152	10	530	ITO-220AB
P7N60	600	30	7	125	1.2	19.8	1152	10	530	TO-220AB
F8N60	600	30	8	45	1.2	22.8	1165	10	500	ITO-220AB
P8N60	600	30	8	125	1.2	22.8	1165	10	500	TO-220AB
F10N60	600	30	10	50	1	41.6	1520	12.5	500	ITO-220AB
P10N60	600	30	10	156	1	41.6	1520	12.5	500	TO-220AB
F7N65	650	30	7	45	1.4	25.7	1100	8	420	ITO-220AB
P7N65	650	30	7	125	1.4	25.7	1100	8	420	TO-220AB
F10N65	650	30	10	50	1	38.6	1450	12	750	ITO-220AB
P10N65	650	30	10	156	1	38.6	1450	12	750	TO-220AB
F12N65	650	30	12	52	0.8	46.8	1800	16	990	ITO-220AB
P12N65	650	30	12	175	0.8	46.8	1800	16	990	TO-220AB
F2N70	700	30	2	20	6.5	10.8	338	2.4	140	ITO-220AB
JU2N70	700	30	2	31	6.5	10.8	338	2.4	140	TO-220AB
P1N80	800	30	1	45	16	6.8	160	1.35	9.8	ITO-220AB
U1N80	800	30	1	31	16	6.8	160	1.35	9.8	TO-220AB

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