

Transistors

Small Signal Transistors

Part Number	BV [V] Min	NF [dB] Max	Hfe			Package
			Min	Max	I _C [mA]	
Low Noise Transistors						
NPN						
MMBT2484	60	3	250		1	SOT-23
KST2484	60	3	250		1	SOT-23
MMBT5962	45	3	600	1400	10	SOT-23
MMBTA18	45	1.5	500	1500	10	SOT-23
MMBT5088	30	3	300	900	0.1	SOT-23
KST5088	30	3	300	900	0.1	SOT-23
MMBT5089	25	2	400	1200	0.1	SOT-23
KST5089	25	2	400	1200	0.1	SOT-23
PN2484	60	3	100	500	0.01	TO-92
2N5961	60	3	150	700	10	TO-92
KSC945	50	4	40	700	1	TO-92
KSC1815	50	1	70	700	2	TO-92
2N6428A	50	2	250	650	0.1	TO-92
2N5209	50	2	100	300	0.1	TO-92
2N5962	45	3	600	1400	10	TO-92
MPSA18	45	1.5	500	1500	10	TO-92
KSC1222	45		120	1000	0.5	TO-92
2N5088	30	3	300	900	0.1	TO-92
2N5089	25	2	400	1200	0.1	TO-92
KSP6520	25	3	200	400	2	TO-92
KSP6521	25	3	300	600	2	TO-92
KSC900	25		120	1000	0.5	TO-92
KSC2785	50	4(Typ)	70	700	1	TO-92S
PNP						
MMBT5086	50	3	150	500	0.1	SOT-23
KST5086	50	3	150	500	0.1	SOT-23
MMBT5087	50	2	250	800	0.1	SOT-23
KST5087	50	2	250	800	0.1	SOT-23
2N5086	50	3	150	500	0.1	TO-92

Transistors
Small Signal Transistors (Continued)

Part Number	BV [V] Min	NF [dB] Max	Hfe			Package
			Min	Max	I _C [mA]	
Low Noise Transistors (Continued)						
PNP (Continued)						
2N5087	50	2	250	800	0.1	TO-92
KSA733	50	20	40	700	1	TO-92
KSA1015	50	6	70	700	2	TO-92
KSA640	40	2	250	700	0.1	TO-92
KSA1175	50	20	40	700	1	TO-92S

Part Number	BV [V] Min	ton (ns) Max	toff (ns) Max	I _C [mA]	Package
High Speed Switches Transistors					
NPN					
MMBT2369	15	12	18	10	SOT-23
MMBT2369A	15	12	18	10	SOT-23
PN2369A	15	12	18	10	TO-92
PN4275	15	12	12	10	TO-92
PN5134	10	18	18	10	TO-92
PNP					
MMBT4209	15	15	20	10	SOT-23
MMBT5771	15	15	20	10	SOT-23
MMBT3640	12	60	75	10	SOT-23
MMBT4258	12	15	20	10	SOT-23
2N5771	15	15	20	10	TO-92
PN3640	12	60	75	10	TO-92
PN4258	12	15	20	10	TO-92

Transistors

Small Signal Transistors

Part Number	BV [V] Min	f _T [MHz] Min	Hfe			Package
			Min	Max	I _C [mA]	
RF Transistors						
NPN						
MMBTH34	45	500	40		7	SOT-23
MMBTH10RG	40	450	50	120	1	SOT-23
MMBTH24	30	400	30		8	SOT-23
KST24	30	400	30		8	SOT-23
KSC2755	30	400	60	240	3	SOT-23
MMBTH10	25	650	60		4	SOT-23
KST10	25	650	60		4	SOT-23
MMBTH11	25	650	60		4	SOT-23
KSC2758	25	750	60	240	3	SOT-23
KSC2756	20	500	60	240	5	SOT-23
KSC2223	20	400	40	180	1	SOT-23
MMBT5770	15	900	50	200	8	SOT-23
MMBT918	15	600	20		3	SOT-23
KSC3120	15	1500	40	200	5	SOT-23
KSC2757	15	800	60	240	5	SOT-23
KSC2759	14	1250	40	180	5	SOT-23
MMBT5179	12	900	25	250	3	SOT-23
KSC5179	12	200	25	250	3	SOT-23
KSC2734	12	1400	20	200	5	SOT-23
KSC838	30	100	40	240	2	TO-92
KSC1070	25	750	40	200	3	TO-92
KSC388	25	300	20	200	12.5	TO-92
SS9016	20	400	28	198	1	TO-92
KSC1187	20	400	40	240	2	TO-92
KSC1188	20	400	40	240	2	TO-92
KSC1674	20	400	40	240	1	TO-92
KSC1675	20	150	40	240	1	TO-92
2N5770	15	900	50	220	8	TO-92
PN918	15	600	20		3	TO-92

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	f _T [MHz] Min	Hfe			Package
			Min	Max	I _C [mA]	
RF Transistors (Continued)						
NPN (Continued)						
SS9018	15	700	28	198	1	TO-92
KSC1395	15	600	40	240	5	TO-92
MPS5179	12	900	25	250	3	TO-92
KSP5179	12	900	25	250	3	TO-92
KSC1730	15	800	40	240	5	TO-92 (94)
MPSH34	40	500	40		7	TO-92 (96)
KSC1393	30	400	40	180	2	TO-92 (96)
KSC1394	30	400	40	180	2	TO-92 (96)
MPSH24	30	400	30		8	TO-92 (96)
KSP24	30	400	30		8	TO-92 (96)
MPSH10	25	650	60		4	TO-92 (96)
KSP10	25	650	60		4	TO-92 (96)
MPSH11	25	650	60		4	TO-92 (96)
KSP11	25	650	60		4	TO-92 (96)
KSC2669	30	100	40	240	2	TO-92S
KSC2787	30	150	40	240	1	TO-92S
KSC2786	20	400	40	240	1	TO-92S
PNP						
MMBTH81	20	600	60		5	SOT-23
MPSH81	20	600	60		5	TO-92

TO-92(94): TO-92 Plastic: E C B

TO-92(96): TO-92 Plastic: B E C

Transistors

Small Signal Transistors

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
General Purpose Transistors						
NPN						
KSC2882	80	400	70	240	50	SOT-89
KSC2883	30	1500	100	320	500	SOT-89
KSC2884	30	800	100	320	100	SOT-89
KSC2982	20 (max)	2000	140	600	50	SOT-89
KSC1621	25 (max)	2000	100	560	100	SOT-89
MMBTA06	80	500	100		10	SOT-23
KST06	80	500	50		100	SOT-23
BC846A	65	100	110	220	2	SOT-23
BC846B	65	100	200	450	2	SOT-23
BCV71	60	500	110	220	2	SOT-23
MMBTA05	60	500	50		10	SOT-23
KST05	60	500	50		100	SOT-23
MMBT3416	50	500	75	225	2	SOT-23
MMBT5210	50	500	200	600	0.1	SOT-23
MMBT6428	50	500	250	650	0.1	SOT-23
KST6428	50	200	250	650	0.1	SOT-23
BC847	45	100	110	800	2	SOT-23
BC847A	45	100	110	220	2	SOT-23
BC847B	45	100	200	450	2	SOT-23
BC847C	45	100	420	800	2	SOT-23
BC850B	45	100	200	450	2	SOT-23
BC850C	45	100	420	800	2	SOT-23
BCW71	45	500	110	220	2	SOT-23
BCX70G	45	200	120	220	2	SOT-23
BCX70H	45	200	180	310	2	SOT-23
BCX70J	45	200	250	460	2	SOT-23
MMBT100	45	500	100	450	10	SOT-23
MMBT100A	45	500	300	600	10	SOT-23
BSR14	40	800	100	300	150	SOT-23

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
General Purpose Transistors (Continued)						
NPN (Continued)						
BSR17A	40	200	100	300	10	SOT-23
BSS79C	40	500	100	300	150	SOT-23
MMBT2222A	40	1000	100	300	150	SOT-23
MMBT3904	40	200	100	300	10	SOT-23
KST3904	40	200	100	300	10	SOT-23
MMBT4400	40	1000	50	150	150	SOT-23
MMBT4401	40	1000	100	300	150	SOT-23
KST4401	40	500	100	300	150	SOT-23
KST1623L3	40	100	60	120	1	SOT-23
KST1623L4	40	100	90	180	1	SOT-23
KST1623L5	40	100	135	270	1	SOT-23
KST1623L6	40	100	200	400	1	SOT-23
KST1623L7	40	100	300	600	1	SOT-23
KST20	40	100	40	400	5	SOT-23
BCW33	32	100	420	800	2	SOT-23
BCW31	20	100	110	220	2	SOT-23
BCW32	32	500	200	450	2	SOT-23
BCW65C	32	500	250	630	100	SOT-23
BCW60A	32	100	120	220	2	SOT-23
BSR13	30	500	100	300	150	SOT-23
BC848A	30	100	110	220	2	SOT-23
BC848B	30	100	200	450	2	SOT-23
BC849C	30	100	420	800	2	SOT-23
MMBT2222	30	1000	100	300	150	SOT-23
KST2222	30	500	100	300	150	SOT-23
KST2859	30	500	70	240	100	SOT-23
MMBT4124	25	200	120	360	2	SOT-23
KST4124	25	200	120	360	2	SOT-23
MMBT6515	25	500	250	500	2	SOT-23

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
General Purpose Transistors (Continued)						
NPN (Continued)						
KST1009F1	25	50	30	60	0.5	SOT-23
KST1009F2	25	50	40	80	0.5	SOT-23
KST1009F3	25	50	60	120	0.5	SOT-23
KST1009F4	25	50	90	180	0.5	SOT-23
KST1009F5	25	50	135	270	0.5	SOT-23
PZT2222A	40	1000	100	300	150	SOT-223
PZT3904	40	200	100	300	10	SOT-223
FJX3904	40	200	100	300	10	SOT-323
FJX2222A	40	600	100	300	150	SOT-323
FJX945	60	150	40	700	1	SOT-323
MPSA06	80	500	100		100	TO-92
KSP06	80	500	50		100	TO-92
MPS8099	80	500	100	300	1	TO-92
KSP8099	80	500	100	300	1	TO-92
KSR2003	80	300	56		5	TO-92
MPS8098	60	500	100	300	1	TO-92
KSP8098	60	500	100	300	1	TO-92
MPSA05	60	500	100		100	TO-92
KSP05	60	500	50		100	TO-92
KSD1616A	60	1000	135	300	1	TO-92
KSC1008	60	700	40	240	50	TO-92
KSC2002	60	300	90	400	50	TO-92
KSC853	60	200	40	400	50	TO-92
2N5210	50	100	200	600	0.1	TO-92
KSD1616	50	1000	135	600	100	TO-92
PN100	45	500	100	450	10	TO-92
PN100A	45	500	300	600	10	TO-92
KSC1072	45	700	40	240	50	TO-92
KSC815	45	300	40	240	50	TO-92

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
General Purpose Transistors (Continued)						
NPN (Continued)						
SS9014	45	100	60	1000	1	TO-92
2N3904	40	200	100	300	10	TO-92
2N4401	40	1000	100	300	150	TO-92
MPS6531	40	1000	90	270	100	TO-92
KSP20	30	400	25		4	TO-92
PN2222A	40	1000	100	300	150	TO-92
PN3569	40	500	100	300	150	TO-92
KSP6602	40	1000	50		500	TO-92
MPS6513	30	200	90	180	2	TO-92
PN2222	30	1000	100	300	150	TO-92
KSP2222	30	500	100	300	150	TO-92
PN3566	30	500	150	600	10	TO-92
PN3643	30	500	100	300	150	TO-92
PN4141	30	500	100	300	15	TO-92
KSC921	30	100	40	240	2	TO-92
KSC839	30	100	40	400	2	TO-92
SS9011	30	30	28	198	1	TO-92
2N4124	25	200	120	360	2	TO-92
2N3415	25	500	180	540	2	TO-92
MPS6514	25	200	150	300	2	TO-92
MPS6515	25	200	250	500	2	TO-92
SS8050	25	1500	80	300	100	TO-92
KSD227	25	300	70	400	50	TO-92
KSP5172	25	100	100	500	10	TO-92
KSC184	25	50	40	1000	1	TO-92
KSD261	20	500	40	400	100	TO-92
SS9013	20	500	64	202	50	TO-92
KSD5041	20	5000	180	600	500	TO-92
KSC5019	10	2000	140	600	500	TO-92

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
General Purpose Transistors (Continued)						
NPN (Continued)						
BC182L	50	500	80		100	TO-92 (94)
BC182LA	50	500	80		100	TO-92 (94)
BC182LB	50	500	80		100	TO-92 (94)
2N3704	30	500	100	300	50	TO-92 (94)
2N3391A	25	500	250	500	2	TO-92 (94)
2N3390	25	500	400	800	2	TO-92 (94)
2N3392	25	500	150	300	2	TO-92 (94)
2N5172	25	500	100	500	10	TO-92 (94)
BC547A	45	100	110	220	2	TO-92 (97)
BC547B	45	500	240	500	2	TO-92 (97)
BC547C	45	500	420	800	2	TO-92 (97)
KSC2331	60	700	40	240	50	TO-92L
KSC2328A	30	2000	100	320	500	TO-92L
KSC2500	10	2000	140	600	500	TO-92L
KSD1021	30	1000	70	400	100	TO-92S
KSC3488	25	300	70	400	50	TO-92S
KSD1020	25	700	70	400	100	TO-92S
KSC2701	20	500	40	400	100	TO-92S
PNP						
KSA1202	80	400	70	240	50	SOT-89
KSA1203	30	1500	100	320	500	SOT-89
KSA1204	30	800	100	320	100	SOT-89
KSB798	25	1000	90	400	100	SOT-89
KSB1121	25	2000	100	560	100	SOT-89
MMBTA56	80	500	100		10	SOT-23
KST56	80	500	50	450	10	SOT-23
BC856B	65	100	200	475	2	SOT-23

TO-92(94): TO-92 Plastic: E C B

TO-92(97): TO-92 Plastic: C B E

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
General Purpose Transistors (Continued)						
PNP (Continued)						
BSR16	60	500	100	300	150	SOT-23
MMBTA55	60	500	100		10	SOT-23
KST55	60	500	50		10	SOT-23
BCW89	60	500	120	260	2	SOT-23
MMBT2907A	60	800	100	300	150	SOT-23
KST2907A	60	600	100	300	10	SOT-23
KSA812	50	100	90	600	1	SOT-23
BC857A	45	500	125	250	2	SOT-23
BC857B	45	500	220	475	2	SOT-23
BC857C	45	500	420	800	2	SOT-23
BC860C	45	100	420	800	2	SOT-23
BCW68G	45	800	160	400	100	SOT-23
BCW69	45	500	120	260	2	SOT-23
BCX71G	45	100	120	220	2	SOT-23
BCX71J	45	100	250	460	2	SOT-23
BCX71K	45	100	380	630	2	SOT-23
MMBT200	45	500	100	450	10	SOT-23
MMBT200A	45	500	300	600	10	SOT-23
BSR15	40	500	100	300	150	SOT-23
BSR18A	40	500	100	300	10	SOT-23
BSR18B	40	500	110	220	10	SOT-23
MMBT2907	40	800	100	300	150	SOT-23
KST2907	40	600	100	300	150	SOT-23
MMBT3906	40	200	100	300	10	SOT-23
KST3906	40	200	100	300	10	SOT-23
MMBT4403	40	800	100	300	150	SOT-23
KST4403	40	600	100	300	150	SOT-23
KST812M4	40	100	90	180	1	SOT-23
KST812M5	40	100	135	270	1	SOT-23

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
General Purpose Transistors (Continued)						
PNP (Continued)						
KST812M6	40	100	200	400	1	SOT-23
KST812M7	40	100	300	600	1	SOT-23
KST70	40	100	40	400	5	SOT-23
BCW30	32	500	215	500	2	SOT-23
BCW61A	32	100	120	630	2	SOT-23
BCW61B	32	100	140	310	2	SOT-23
BCW61C	32	100	250	460	2	SOT-23
BCW61D	32	100	380	630	2	SOT-23
BC858A	30	100	125	250	2	SOT-23
BC858B	30	100	220	475	2	SOT-23
BC858C	30	100	420	800	2	SOT-23
BC859A	30	100	110	220	2	SOT-23
BC859B	30	100	200	450	2	SOT-23
BC859C	30	100	420	800	2	SOT-23
KST4126	25	500	120	360	2	SOT-23
KSA1298	25	800	100	320	100	SOT-23
BCW29	20	100	120	260	2	SOT-23
KSA1182	30	500	70	240	100	SOT-23
KST4125	30	200	50	150	2	SOT-23
MMBT3702	25	800	60	300	50	SOT-23
MMBT4126	25	200	120	300	2	SOT-23
FJX733	60	20	40	400	1	SOT-323
FJX1182	30	500	70	240	100	SOT-323
FJX2907A	60	600	100	300	150	SOT-323
FJX3906	40	200	100	300	10	SOT-323
PZT2907A	60	800	100	300	150	SOT-223
PZT3906	40	200	100	300	10	SOT-223
FSB6726	30	1500	50	250	1000	SSOT-3
MPSA56	80	500	100		10	TO-92

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
General Purpose Transistors (Continued)						
PNP (Continued)						
KSP56	80	500	50		10	TO-92
KSP8599	80	300	100	300	1	TO-92
PN2907A	60	800	100	300	150	TO-92
PN4249	60	500	100	300	0.1	TO-92
MPSA55	60	500	100		10	TO-92
KSP55	60	500	50		10	TO-92
PN4250A	60	500	250	300	0.1	TO-92
KSB1116A	60	1000	135	400	100	TO-92
KSA708	60	700	40	240	50	TO-92
KSA953	60	300	90	400	50	TO-92
KSA545	60	200	40	400	50	TO-92
KSP8598	60	500	100	300	1	TO-92
PN200	45	500	100	350	150	TO-92
PN200A	45	500	300	600	10	TO-92
PN3644	45	500	100	300	150	TO-92
KSA539	45	200	40	240	50	TO-92
SS9015	45	100	60	600	1	TO-92
2N3906	40	200	100	300	10	TO-92
2N4403	40	600	100	300	150	TO-92
MPS6518	40	200	150	300	2	TO-92
MPS6534	40	500	90	270	100	TO-92
PN2907	40	500	100	300	150	TO-92
PN4122	40	200	150	300	10	TO-92
PN4143	40	500	100	300	150	TO-92
KSP70	40	100	40	400	5	TO-92
PN4917	30	200	150	300	10	TO-92
2N4126	25	200	120	300	2	TO-92
MPS3702	25	500	60	300	50	TO-92
MPS6523	25	500	300	600	2	TO-92

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
General Purpose Transistors (Continued)						
PNP (Continued)						
SS8550	25	1500	85	300	100	TO-92
KSB564A	25	1000	70	400	100	TO-92
KSA642	25	300	70	400	50	TO-92
KSA542	25	50	40	400	1	TO-92
KSA643	20	500	40	400	100	TO-92
SS9012	20	500	64	202	50	TO-92
KSA733	50	150	40	700	1	TO-92
KSA954	80	300	90	400	50	TO-92 (94)
BC212L	50	300	60	300	2	TO-92 (94)
BC212LB	50	500	200	400	2	TO-92 (94)
2N5366	40	500	100	300	50	TO-92 (94)
BC213L	30	500	80	400	2	TO-92 (94)
BC214L	30	500	140	400	2	TO-92 (94)
BC214LB	30	500	200	400	2	TO-92 (94)
BC214LC	30	500	350	600	2	TO-92 (94)
2N3702	25	500	60	300	50	TO-92 (94)
2N6076	25	500	100	500	10	TO-92 (94)
KSA931	60	700	40	240	50	TO-92L
KSA928A	30	2000	100	320	500	TO-92L
KSA1281	50	2000	70	240	500	TO-92L
KSA1378	25	300	70	400	50	TO-92S
KSB810	25	700	70	400	100	TO-92S
KSB811	25	1000	70	400	100	TO-92S
KSA1150	20	500	40	400	100	TO-92S

TO-92(94): TO-92 Plastic: E C B

Transistors
Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
Medium Power Transistors						
NPN						
BC817-25	45	1500	160	400	100	SOT-23
BC817-40	45	1500	250	600	100	SOT-23
BCX19	45	1000	100	600	100	SOT-23
NZT6717	80	1200	50	250	250	SOT-223
BCP54	45	1500	40	250	150	SOT-223
NZT6715	40	1500	50	250	100	SOT-223
NZT6714	30	2000	50	250	1,000	SOT-223
SS8050	25	1	85	300	100	TO-92
FJN965	20	5000	230	600	500	TO-92
BC639	80	1	40	250	150	TO-92 (94)
BC637	60	1	40	250	150	TO-92 (94)
BC635	45	1	40	250	150	TO-92 (94)
BC368	20	2	85	375	500	TO-92 (94)
BC337-25	45	0.8	160	400	100	TO-92 (97)
BC337-16	45	0.8	100	250	100	TO-92 (97)
TN6717A	80	1.2	50	250	250	TO-226
TN3019A	80	1	100	300	150	TO-226
TN6715A	40	1.5	50	250	100	TO-226
TN6714A	30	2	50	250	1,000	TO-226
PNP						
MMBT4356	80	800	50	250	10	SOT-23
MMBT4355	60	800	100	400	10	SOT-23
BC807-16	45	1200	100	250	100	SOT-23
BC807-25	45	1200	160	400	100	SOT-23
BC807-40	45	1200	250	600	100	SOT-23
BCX17	45	1500	100	600	100	SOT-23
BCX18	25	500	100	600	100	SOT-23

TO-92(94): TO-92 Plastic: E C B

TO-92(97): TO-92 Plastic: C B E

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
Medium Power Transistors (Continued)						
PNP (Continued)						
NZT6729	80	1000	50	250	250	SOT-223
NZT6728	60	1200	50	250	250	SOT-223
NZT6726	30	1500	50	250	1,000	SOT-223
PN4356	80	0.8	50	250	10	TO-92
PN4355	60	0.8	100	400	10	TO-92
SS8550	25	1.5	85	300	100	TO-92
BC640	80	1	40	250	150	TO-92 (94)
BC638	60	1	40	250	150	TO-92 (94)
BC636	45	1	40	250	150	TO-92 (94)
BC369	20	1.5	85	375	500	TO-92 (94)
TN6729A	80	1	50	250	250	TO-226
TN4033A	80	1	100	300	100	TO-226
TN6728A	60	1.2	50	250	250	TO-226
TN6726A	30	1.5	50	200	1,000	TO-226
High Voltage Transistors						
NPN						
MMBTA42	300	500	40		10	SOT-23
KST42	300	500	40		10	SOT-23
MMBTA43	200	200	40		10	SOT-23
KST43	200	500	40		10	SOT-23
MMBT5551	160	600	80	250	10	SOT-23
KST5551	160	600	80	250	10	SOT-23
KSC2880	150	50	70	240	10	SOT-89
KSC2881	120	800	80	240	100	SOT-89
PZTA42	300	500	40		10	SOT-223
KSP44	500	300	50	200	10	TO-92
2N6517	350	500	30	200	30	TO-92

TO-92(94): TO-92 Plastic: E C B

Transistors
Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
High Voltage Transistors (Continued)						
NPN (Continued)						
KSP45	350	300	50	200	10	TO-92
MPSA42	300	200	40		30	TO-92
KSP42	300	200	40		30	TO-92
2N6516	300	500	45	270	30	TO-92
2N6515	250	500	50	300	30	TO-92
MPSA43	200	200	50	200	30	TO-92
KSP43	200	200	50	200	30	TO-92
2N5551	160	600	80	250	10	TO-92
2N5550	140	600	60	250	10	TO-92
KSC1009	140	700	40	400	50	TO-92
MPSL01	120	200	50	300	10	TO-92
2N5830	100	200	80	500	10	TO-92
BF420	300	200	50		25	TO-92 (94)
KSC1845	120	50	200	1200	1	TO-92 (94)
KSC340	350	100	30	150	20	TO-92L
KSC2330	300	100	40	240	20	TO-92L
KSC2383	160	1000	60	320	200	TO-92L
KSC2310	150	50	40	240	10	TO-92L
KSC2316	120	800	80	240	100	TO-92L
KSC2874	120	50	200	800	1	TO-92S
PNP						
MMBTA92	300	500	40		10	SOT-23
KST92	300	500	40		10	SOT-23
MMBTA93	200	200	40		10	SOT-23
KST93	200	500	40		10	SOT-23
MMBT5401	150	600	60	240	10	SOT-23
KST5401	150	500	60	240	10	SOT-23

TO-92(94): TO-92 Plastic: E C B

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
High Voltage Transistors (Continued)						
PNP (Continued)						
KSA1200	150	50	70	240	10	SOT-89
KSA1201	120	800	80	240	100	SOT-89
PZTA92	300	500	40		10	SOT-223
KSE13001	400	100	40	80	20	TO-92
KSA1625	400	500	30	200	0.1	TO-92
2N6520	350	500	30	200	30	TO-92
MPSA92	300	500	40		10	TO-92
KSP92	300	500	40		10	TO-92
2N6519	300	500	45	270	30	TO-92
2N6518	250	500	50	300	30	TO-92
MPSA93	200	200	25		30	TO-92
KPS93	200	500	25		30	TO-92
2N5401	150	600	60	240	10	TO-92
KSP709	150	700	40	240	50	TO-92
2N5400	120	600	40	180	10	TO-92
KSA992	120	50	200	800	1	TO-92
MPSL51	100	200	40	250	50	TO-92
BF421	300	100	50		25	TO-92 (94)
KSA1013	160	1000	60	320	200	TO-92L
KSA910	150	50	40	240	10	TO-92L
KSA916	120	800	80	240	100	TO-92L
KSA1174	120	50	200	800	1	TO-92S
Darlington Transistors						
NPN						
MMBT6427	40	1.2	20,000	200,000	100	SOT-23
MMBTA14	30	1.2	20,000		100	SOT-23
MMBTA13	30	1.2	10,000		100	SOT-23
NZT7053	100	1.5	10,000		100	SOT-223

TO-92(94): TO-92 Plastic: E C B

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	H _{fe}			Package
			Min	Max	I _C [mA]	
Darlington Transistors (Continued)						
NPN (Continued)						
PZTA14	30	1.2	10,000		10	SOT-223
MPSA29	100	0.8	10,000		100	TO-92
MPSA28	80	0.8	10,000		100	TO-92
MPSA27	60	0.8	10,000		100	TO-92
2N6426	40	1.2	30,000	300,000	100	TO-92
2N6427	40	1.2	20,000	200,000	100	TO-92
MPSA13	30	1.2	10,000		100	TO-92
KSP13	30	0.5	10,000		100	TO-92
MPSA14	30	1.2	20,000		100	TO-92
KSP14	30	0.5	20,000		100	TO-92
KSP12	20	0.5	20,000		10	TO-92
2N7052	100	1.5	1,000	20,000	1,000	TO-92 (92)
BSR50	40	1.5	1,000		150	TO-92 (94)
2N5307	40	1.2	2,000	20,000	2	TO-92 (94)
2N5308	40	1.2	7,000	70,000	2	TO-92 (94)
2N7053	100	1.5	1,000	20,000	1,000	TO-226
TN6725A	50	1.2	4,000	40,000	1,000	TO-226
PNP						
BCV26	30	1.2	10,000		10	SOT-23
MMBTA64	30	1.2	10,000		10	SOT-23
KST63	30	0.3	10,000		100	SOT-23
PZTA64	30	1.2	10,000		10	SOT-223
KSP77	60	0.5	10,000		100	TO-92
KSP76	50	0.5	10,000		100	TO-92
KSP75	40	0.5	10,000		100	TO-92
MPSA63	30	1.2	20,000		100	TO-92
KSP63	30	0.5	20,000		100	TO-92
MPSA64	30	1.2	20,000		100	TO-92
KSP64	30	0.5	20,000		100	TO-92

TO-92(92): TO-92 Plastic: E B C

TO-92(94): TO-92 Plastic: E C B

Transistors
Small Signal Transistors (Continued)

Part Number	R1 [kohm]	R2 [kohm]	BV _{CEO} [V]	I _C [A]	Hfe		Condition		V _{CE(sat)} [V] Max	V _{BE(sat)} [V] Max	Condition		f _T [MHz] Typ	Package
					Min	Max	V _{CE} [V]	I _C [mA]			I _C [mA]	I _B [mA]		
Digital Transistors														
NPN														
KSR1001	4.7	4.7	50	0.1	20		5	10	0.1	0.3	10	0.5	250	TO-92
KSR1002	10	10	50	0.1	30		5	4	0.1	0.3	10	0.5	250	TO-92
KSR1003	22	22	50	0.1	56		5	5	0.1	0.3	10	0.5	250	TO-92
KSR1004	47	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	TO-92
KSR1005	4.7	10	50	0.1	30		5	5	0.1	0.3	10	0.5	250	TO-92
KSR1006	10	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	TO-92
KSR1007	22	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	TO-92
KSR1008	47	22	50	0.1	56		5	5	0.1	0.3	10	0.5	250	TO-92
KSR1009	4.7		40	0.1	100	600	5	5	0.1	0.3	10	1	250	TO-92
KSR1010	10		40	0.1	100	600	5	1	0.1	0.3	10	1	250	TO-92
KSR1011	22		40	0.1	100	600	5	1	0.1	0.3	10	1	250	TO-92
KSR1012	47		40	0.1	100	600	5	1	0.1	0.3	10	1	250	TO-92
KSR1013	2.2	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	TO-92
KSR1014	4.7	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	TO-92
KSR1201	4.7	4.7	50	0.1	20		5	10	0.1	0.3	10	0.5	250	TO-92S
KSR1202	10	10	50	0.1	30		5	4	0.1	0.3	10	0.5	250	TO-92S
KSR1203	22	22	50	0.1	56		5	5	0.1	0.3	10	0.5	250	TO-92S
KSR1204	47	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	TO-92S
KSR1205	4.7	10	50	0.1	30		5	5	0.1	0.3	10	0.5	250	TO-92S
KSR1206	10	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	TO-92S
KSR1207	22	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	TO-92S
KSR1208	47	22	50	0.1	56		5	5	0.1	0.3	10	0.5	250	TO-92S
KSR1209	4.7		40	0.1	100	600	5	5	0.1	0.3	10	1	250	TO-92S
KSR1210	10		40	0.1	100	600	5	1	0.1	0.3	10	1	250	TO-92S
KSR1211	22		40	0.1	100	600	5	1	0.1	0.3	10	1	250	TO-92S
KSR1212	47		40	0.1	100	600	5	1	0.1	0.3	10	1	250	TO-92S
KSR1213	2.2	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	TO-92S
KSR1214	4.7	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	TO-92S

Transistors

Small Signal Transistors (Continued)

Part Number	R1 [kohm]	R2 [kohm]	BV _{CEO} [V]	I _C [A]	Hfe		Condition		V _{CE(sat)} [V] Max	V _{BE(sat)} [V] Max	Condition		f _T [MHz] Typ	Package
					Min	Max	V _{CE} [V]	I _C [mA]			I _C [mA]	I _B [mA]		
Digital Transistors (Continued)														
NPN (Continued)														
KSR1101	4.7	4.7	50	0.1	20		5	10	0.1	0.3	10	0.5	250	SOT-23
KSR1102	10	10	50	0.1	30		5	4	0.1	0.3	10	0.5	250	SOT-23
KSR1103	22	22	50	0.1	56		5	5	0.1	0.3	10	0.5	250	SOT-23
KSR1104	47	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	SOT-23
KSR1105	4.7	10	50	0.1	30		5	5	0.1	0.3	10	0.5	250	SOT-23
KSR1106	10	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	SOT-23
KSR1107	22	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	SOT-23
KSR1108	47	22	50	0.1	56		5	5	0.1	0.3	10	0.5	250	SOT-23
KSR1109	4.7		40	0.1	100	600	5	5	0.1	0.3	10	1	250	SOT-23
KSR1110	10		40	0.1	100	600	5	1	0.1	0.3	10	1	250	SOT-23
KSR1111	22		40	0.1	100	600	5	1	0.1	0.3	10	1	250	SOT-23
KSR1112	47		40	0.1	100	600	5	1	0.1	0.3	10	1	250	SOT-23
KSR1113	2.2	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	SOT-23
KSR1114	4.7	47	50	0.1	68		5	5	0.1	0.3	10	0.5	250	SOT-23
FJX3001R	4.7	4.7	50	0.1	20		5	10	0.3		10	0.5	250	SOT-323
FJX3002R	10	10	50	0.1	30		5	10	0.3		10	0.5	250	SOT-323
FJX3003R	22	22	50	0.1	56		5	5	0.3		10	0.5	250	SOT-323
FJX3004R	47	47	50	0.1	68		5	5	0.3		10	0.5	250	SOT-323
FJX3005R	4.7	10	50	100	30		5	5	0.3		10	0.5	250	SOT-323
FJX3006R	10	47	50	100	68		5	10	0.3		10	0.5	250	SOT-323
FJX3007R	22	47	50	100	68		5	5	0.3		10	0.5	250	SOT-323
FJX3008R	47	22	50	100	56		5	5	0.3		10	0.5	250	SOT-323
FJX3009R	4.7		40	100	100	600	5	1	0.3		10	0.5	250	SOT-323
FJX3015R	2.2	10	50	100	33		5	10	0.3		10	0.5	250	SOT-323
PNP														
KSR2001	4.7	4.7	50	0.1	20		5	10	0.1	0.3	10	0.5	250	TO-92
KSR2002	10	10	50	0.1	30		5	4	0.1	0.3	10	0.5	200	TO-92
KSR2003	22	22	50	0.1	56		5	5	0.1	0.3	10	0.5	200	TO-92

Transistors

Small Signal Transistors (Continued)

Part Number	R1 [kohm]	R2 [kohm]	BV _{CEO} [V]	I _C [A]	H _{fe}		Condition		V _{CE(sat)} [V] Max	V _{BE(sat)} [V] Max	Condition		f _T [MHz] Typ	Package
					Min	Max	V _{CE} [V]	I _C [mA]			I _C [mA]	I _B [mA]		
Digital Transistors (Continued)														
PNP (Continued)														
KSR2004	47	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	TO-92
KSR2005	4.7	10	50	0.1	30		5	5	0.1	0.3	10	0.5	200	TO-92
KSR2006	10	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	TO-92
KSR2007	22	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	TO-92
KSR2008	47	22	50	0.1	56		5	5	0.1	0.3	10	0.5	200	TO-92
KSR2009	4.7		40	0.1	100	600	5	5	0.1	0.3	10	1	200	TO-92
KSR2010	10		40	0.1	100	600	5	1	0.1	0.3	10	1	200	TO-92
KSR2011	22		40	0.1	100	600	5	1	0.1	0.3	10	1	200	TO-92
KSR2012	47		40	0.1	100	600	5	1	0.1	0.3	10	1	200	TO-92
KSR2013	2.2	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	TO-92
KSR2014	4.7	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	TO-92
KSR2201	4.7	4.7	50	0.1	20		5	10	0.1	0.3	10	0.5	250	TO-92S
KSR2202	10	10	50	0.1	30		5	4	0.1	0.3	10	0.5	200	TO-92S
KSR2203	22	22	50	0.1	56		5	5	0.1	0.3	10	0.5	200	TO-92S
KSR2204	47	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	TO-92S
KSR2205	4.7	10	50	0.1	30		5	5	0.1	0.3	10	0.5	200	TO-92S
KSR2206	10	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	TO-92S
KSR2207	22	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	TO-92S
KSR2208	47	22	50	0.1	56		5	5	0.1	0.3	10	0.5	200	TO-92S
KSR2209	4.7		40	0.1	100	600	5	5	0.1	0.3	10	1	200	TO-92S
KSR2210	10		40	0.1	100	600	5	1	0.1	0.3	10	1	200	TO-92S
KSR2211	22		40	0.1	100	600	5	1	0.1	0.3	10	1	200	TO-92S
KSR2212	47		40	0.1	100	600	5	1	0.1	0.3	10	1	200	TO-92S
KSR2213	2.2	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	TO-92S
KSR2214	4.7	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	TO-92S
KSR2101	4.7	4.7	50	0.1	20		5	10	0.1	0.3	10	0.5	250	SOT-23
KSR2102	10	10	50	0.1	30		5	4	0.1	0.3	10	0.5	200	SOT-23
KSR2103	22	22	50	0.1	56		5	5	0.1	0.3	10	0.5	200	SOT-23

Transistors

Small Signal Transistors (Continued)

Part Number	R1 [kohm]	R2 [kohm]	BV _{CEO} [V]	I _C [A]	Hfe		Condition		V _{CE(sat)} [V] Max	V _{BE(sat)} [V] Max	Condition		f _T [MHz] Typ	Package
					Min	Max	V _{CE} [V]	I _C [mA]			I _C [mA]	I _B [mA]		
Digital Transistors (Continued)														
PNP (Continued)														
KSR2104	47	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	SOT-23
KSR2105	4.7	10	50	0.1	30		5	5	0.1	0.3	10	0.5	200	SOT-23
KSR2106	10	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	SOT-23
KSR2107	22	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	SOT-23
KSR2108	47	22	50	0.1	56		5	5	0.1	0.3	10	0.5	200	SOT-23
KSR2109	4.7		40	0.1	100	600	5	5	0.1	0.3	10	1	200	SOT-23
KSR2110	10		40	0.1	100	600	5	1	0.1	0.3	10	1	200	SOT-23
KSR2111	22		40	0.1	100	600	5	1	0.1	0.3	10	1	200	SOT-23
KSR2112	47		40	0.1	100	600	5	1	0.1	0.3	10	1	200	SOT-23
KSR2113	2.2	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	SOT-23
KSR2114	4.7	47	50	0.1	68		5	5	0.1	0.3	10	0.5	200	SOT-23
FJX4001R	4.7	4.7	50	100	20		5	10	0.3		10	0.5	200	SOT-323
FJX4002R	10	10	50	100	30		5	5	0.3		10	0.5	200	SOT-323
FJX4003R	22	22	50	100	56		5	5	0.3		10	0.5	200	SOT-323
FJX4004R	47	47	50	100	68		5	5	0.3		10	0.5	200	SOT-323
FJX4005R	4.7	10	50	100	30		5	5	0.3		10	0.5	200	SOT-323
FJX4006R	10	47	50	100	68		5	5	0.3		10	0.5	200	SOT-323
FJX4007R	22	47	50	100	68		5	5	0.3		10	0.5	200	SOT-323
FJX4008R	47	22	50	100	56		5	5	0.3		10	0.5	200	SOT-323
FJX4009R	4.7		40	100	100	600	5	1	0.3		10	1	200	SOT-323

Transistors
Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	V _{CE(sat)} [mV] Max	I _C [A]	h _{FE}			Package
					Min	Max	I _C [mA]	
Low Saturation Transistors								
NPN								
NZT560	60	3	450	3	100	300	500	SOT-223
NZT560A	60	3	400	3	250	550	500	SOT-223
FZT649	25	3	600	3	100	300	1,000	SOT-223
FSB560	60	2	300	1	100	300	500	SuperSOT-3
FSB560A	60	2	300	1	250	550	500	SuperSOT-3
FSB619	50	2	235	1	200		10	SuperSOT-3
FMMT449	30	2	500	1	100	300	500	SuperSOT-3
FPN560	60	3	300	1	100	300	500	TO-226
FPN560A	60	3	300	1	250	550	500	TO-226
FPN330	30	2	500	1	100		100	TO-226
FPN330A	30	2	500	1	250		100	TO-226
FPN530	30	2	300	1	100		100	TO-226
FPN530A	30	2	250	1	250		100	TO-226
PNP								
NZT660	60	3	550	3	100	300	500	SOT-223
NZT660A	60	3	500	1	100	300	500	SOT-223
FZT790A	40	3	450	1	200		1,000	SOT-223
FZT749	25	3	300	1	100	300	1,000	SOT-223
FSB660	60	2	350	1	100	300	500	SuperSOT-3
FSB660A	60	2	300	1	250	550	500	SuperSOT-3
FMMT549	30	2	500	1	100	300	500	SuperSOT-3
MPS751	60	2	300	1	75		500	TO-92
FPN660	60	3	350	1	100	300	500	TO-226
FPN660A	60	3	300	1	250	550	500	TO-226
FPN430	30	2	500	1	100		100	TO-226
FPN430A	30	2	450	1	250		100	TO-226
FPN630	30	2	300	1	100		100	TO-226
FPN630A	30	2	250	1	250		100	TO-226
ZTX749A	35	2	300	1	100	300	1000	TO-226

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	h _{FE}			Package
			Min	Max	I _C [mA]	
Multi-Chip Transistors						
NPN						
BC847S	45	100	110	630	2	SC70-6 Dual
FFB2222A	40	500	100	300	150	SC70-6 Dual
FFB3904	40	200	100	300	10	SC70-6 Dual
FMB100	45	500	100	450	10	SuperSOT-6 Dual
FMB2222A	40	500	100	300	150	SuperSOT-6 Dual
FMB3904	40	200	100	300	10	SuperSOT-6 Dual
FMBA06	80	500	100		10	SuperSOT-6 Dual
MMPQ2222A	40	500	100	300	150	SOIC-16 Quad
MMPQ3904	40	200	100	300	10	SOIC-16 Quad
MMPQ2369A	15	200	20		100	SO-16
FMB5551	160	100	80	250	10	SuperSOT-6 Dual
FMBA14	30	1200	10,000		10	SuperSOT-6 Dual
PNP						
BC857S	45	100	125	630	2	SC70-6 Dual
FFB2907A	60	600	100	300	150	SC70-6 Dual
FFB3906	40	200	100	300	10	SC70-6 Dual
FMB200	45	500	100	450	10	SuperSOT-6 Dual
FMB2907A	60	600	100	300	150	SuperSOT-6 Dual
FMB3906	40	200	100	300	10	SuperSOT-6 Dual
FMBA56	80	500	100		10	SuperSOT-6 Dual
MMPQ2907A	60	600	100	300	150	SOIC-16 Quad
MMPQ3906	40	200	100	300	10	SOIC-16 Quad

Transistors

Small Signal Transistors (Continued)

Part Number	BV [V] Min	I _C [mA] Max	Hfe			Package
			Min	Max	I _C [mA]	
Complimentary Transistors						
FMB1020	45	500	100	450	10	SuperSOT-6 Dual
FMB2227A	30	500	100		150	SuperSOT-6 Dual
FFB2227A	30	500	100		150	SC70-6 Dual
FMB3946	40	200	100	300	10	SuperSOT-6 Dual
FFB3946	40	200	100	300	10	SC70-6 Dual
FMBA0656	80	500	100		10	SuperSOT-6 Dual
MMPQ6502	30	600	100		150	SOIC-16 Quad
MMPQ6700	40	200	70		10	SOIC-16 Quad