

## TOSHIBA

### TA Series IC for Audio , Video & Television Application

TA1201AN	<b>TA2003P</b>	TA2008AN	TA2011S	TA2041N	TA31002AP	TA7061BP	<b>TA7222AP</b>
<b>TA7230P</b>	TA7240AP	TA7245BP	TA7250BP	TA7251BP	TA7252BP	<b>TA7270P</b>	<b>TA7271P</b>
TA7274P	<b>TA7280P</b>	TA7281P	TA7282AP	TA7283AP	TA7291S	TA7291P	<b>TA7299P</b>
TA7303P	TA7317P	TA7320P	TA7335P	TA7342F	TA7342P	TA7343AP	TA7344P
TA7354P	TA7357P	<b>TA7358AP</b>	TA7359P	<b>TA7368P</b>	TA7370P	TA7401AP	TA7417AP
TA7607AP	TA7609P	TA7611AP	<b>TA7613AP</b>	TA7628HP	TA7630P	TA7640AP	TA7644BP
TA7668BP	TA7691P	TA7698AP	TA7713P	TA7769P	TA7778P	TA7784P	TA7792P
TA7796P	TA8029S	<b>TA8119P</b>	TA8122AN	TA8125S	TA8126S	TA8127N	TA8132AN
TA8132AF	TA8164P	TA8173AP	TA8176SN	TA8184P	TA8189N	TA8200AH	<b>TA8205AH</b>
<b>TA8210AH</b>	TA8211AH	TA8213K	<b>TA8215H</b>	TA8216H	<b>TA8217P</b>	TA8220H	TA8221AH
TA8223K	TA8225H	TA8227P	<b>TA8229K</b>	<b>TA8238K</b>	TA8248K	<b>TA8403K</b>	TA8410AK
<b>TA8427K</b>	TA8428K	TA8435H	<b>TA8445K</b>	TA8611AN	TA8615N	TA8622N	TA8628N
<b>TA8637BP</b>	TA8638N	TA8650N	TA8660P	TA8662N	<b>TA8690AN</b>	TA8692CN	TA8694N
TA8701N	TA8710S	TA8725AN	TA8759CN	TA8871N	TB1226DN	<b>TD62003AP</b>	<b>TD62004AP</b>

### TC4000 SERIES CMOS

TC4001BP	TC4011BP	TC4013BP	TC4017BP	TC4040BP	TC4049BP	TC4051BP	TC4053BP
TC4066BP	TC4069UBP	TC4071BP	TC4093BP	TC4094BP	TC4081BP	TC4510BP	TC4520BP

### TC 74HC Series

TC74HC00AP	TC74HC08AP	TC74HC14AP	TC74HC86AP	TC74HC174AP	TC74HC240AP	TC74HC244AP	TC74HC573AP
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### TC9000 SERIES DIGITAL IC

TC9147BP	TC9148P	TC9149P	TC9153AP	TC9163AN	TC9164N	TC9174P	TC9184AP
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### Fiber-Optic Devices

Transmitting	Receiving	Transmitting	Receiving	Transmitting	Receiving	Transmitting	Receiving
TOTX173	TORX173	TOTX176	TORX176	TOTX178S	TORX178S	TOTX179	TORX179

### 2SA, 2SB, 2SC, 2SD SERIES

#### 1. Small Signal Amplifier ,General Purpose Transistor

TO-92		Mini (SPA)		SC-59 (~SOT-23)		USM	
PNP	NPN	PNP	NPN	PNP	NPN	PNP	NPN
<b>2SA1015</b>	<b>2SC1815</b>	<b>2SA1048</b>	<b>2SC2458</b>	<b>2SA1162</b>	<b>2SC2712</b>	2SA1586	2SC4116
<b>2SA970</b>	<b>2SC2240</b>	2SA1049	2SC2459	2SA1163	2SC2713	2SA1587	2SC4117
<b>2SA950</b>	<b>2SC2120</b>	2SA1150	2SC2710	<b>2SA1298</b>	<b>2SC3265</b>		
<b>2SA562</b>	<b>2SC1959</b>			2SA1182	2SC2859	2SA1588	2SC4118
	<b>2SC2878</b>		2SC3327		2SC3326		2SC4213
	2SC3112		2SC3113		2SC3295		2SC4666

### Table of Substitution

Toshiba	HITACHI	NEC	ROHM	Mat	Fairchild	KEC	KEC
<b>2SA1015</b>	2SA1029	2SA733	2SA933	2SA608	KSA733	<b>KTC9015</b>	<b>KTA1266</b>
<b>2SA562</b>	2SA673		2SA854	2SA719	SS9012	<b>KTC9012</b>	<b>KTA1270</b>
<b>2SA950</b>	2SB561	2SA952	2SB1237	2SB621	KSA952	<b>KTC8550</b>	<b>KTA1271</b>
<b>2SA970</b>		2SA992	2SA1038	2SA1123	KSA992		<b>KTA1268</b>
<b>2SC1815</b>	2SC458	2SC945	2SC1740	2SC3311A	KSC945	<b>KTC9014</b>	<b>KTC3198</b>
<b>2SC1923</b>	2SC1342	2SC1674	2SC1809	2SC1047	KSC1674	<b>KTC9018</b>	<b>KTC3194</b>
<b>2SC1959</b>	2SC1213		2SC1741	2SC1318	SS9013	<b>KTC9013</b>	<b>KTC3202</b>
<b>2SC2120</b>	2SD467	2SC2001	2SD1858	2SD592	KSC2001	<b>KTC8050</b>	<b>KTC3203</b>
<b>2SC2240</b>		2SC1845	2SC2389	2SC2631	KSC1845		<b>KTC3200</b>
<b>2SC380TM</b>	2SC460	2SC1675	2SC2058	2SC829	SS9011	<b>KTC9011</b>	<b>KTC3192</b>

### 2. POWER BIPOLAR TRANSISTOR

PNP	NPN	BRAND	PACKAGE	Vceo	Ic	Pc	hFE
KTA1276	KTC3230	KEC	TO-220AB	30	3	10	70-240
KTA1658	KTC4369	KEC	TO-220IS	30	3	15	70-240
KTB1366	KTD2058	KEC	TO-220IS	60	3	25	60-200
<b>2SB1375</b>	<b>2SD2012</b>	<b>TOSHIBA</b>	<b>TO-220IS</b>	<b>60</b>	<b>3</b>	<b>25</b>	<b>100-320</b>
KTB988	KTD1351	KEC	TO-220AB	60	3	30	60-300
2SB834	2SD880	TOSHIBA	TO-220AB	60	3	30	60-300
PMB834	PMD880	PMC	TO-220AB	60	3	30	60-300
2SA1939	2SC5196	TOSHIBA	TO-3PN	80	6	60	55-160
TIP32C	TIP31C	KEC	TO-220AB	100	3	40	10-50
TIP42C	TIP41C	KEC	TO-220AB	100	3	65	15-75
2SA1358	2SC3421	TOSHIBA	TO-126IS	120	1	10	80-240
2SA1940	2SC5197	TOSHIBA	TO-3PN	120	8	80	55-160
<b>KTB688</b>	<b>KTD718</b>	<b>KEC</b>	<b>TO-3PN</b>	<b>120</b>	<b>10</b>	<b>80</b>	<b>55-160</b>
<b>PMC688</b>	<b>PMD718</b>	<b>PMC</b>	<b>TO-3PN</b>	<b>120</b>	<b>10</b>	<b>80</b>	<b>55-160</b>
KTB778	KTD998	KEC	TO-3PM	120	10	80	55-160
2SA1941	2SC5198	TOSHIBA	TO-3PN	140	10	100	55-160
2SB817	2SD1047	Sanyo	TO-3PN	140	12	100	60-200
<b>KTB817</b>	<b>KTD1047</b>	<b>KEC</b>	<b>TO-3PN</b>	<b>140</b>	<b>12</b>	<b>100</b>	<b>60-200</b>
<b>PMB817</b>	<b>PMD1047</b>	<b>PMC</b>	<b>TO-3PN</b>	<b>140</b>	<b>12</b>	<b>100</b>	<b>60-200</b>
2SA1360	2SC3423	TOSHIBA	TO-126IS	150	0.05	5	80-240
2SA1930	2SC5171	TOSHIBA	TO-220NIS	180	2	20	100-320
<b>2SA1837</b>	<b>2SC4793</b>	<b>TOSHIBA</b>	<b>TO-220NIS</b>	<b>230</b>	<b>1</b>	<b>20</b>	<b>100-320</b>
2SA1932	2SC5174	TOSHIBA	TPL	230	1	1.8	100-320
<b>KTA1962</b>	<b>KTC5242</b>	<b>KEC</b>	<b>TO-3PN</b>	<b>230</b>	<b>15</b>	<b>130</b>	<b>55-160</b>
2SA1962	2SC5242	TOSHIBA	TO-3PN	230	15	130	55-160
<b>2SA1943</b>	<b>2SC5200</b>	<b>TOSHIBA</b>	<b>TO-3PL</b>	<b>230</b>	<b>15</b>	<b>150</b>	<b>55-160</b>

### 3. CTV Horizontal deflection output

2SC5048	2SC5129	<b>2SC5148</b>	2SC5149	2SC5150	2SC5331	2SC5339	<b>2SC5386</b>
2SC5387	2SC5404	2SC5411	<b>2SD2499</b>	2SD2539			

### 4. Audio & TV TRANSISTOR

TOSHIBA		KEC		TOSHIBA		KEC	
PNP	NPN	PNP	NPN	PNP	NPN	PNP	NPN
2SA817A	2SC1627A	KTA1274	KTC3227	2SA1013	2SC2383	KTA1275	KTC3228
2SA940A	2SC2073A	KTA940	KTC2073	2SA966	2SC2236	KTA1273	KTC3205
2SA949	2SC2229	KTA1024	KTC3206		2SC2230		KTC1026
2SA965	2SC2235	KTA1023	KTC1027		2SC2482		KTC3207

### 5. Transistor stock List - Toshiba

2SA467	<b>2SA562</b>	2SA679	2SA817A	2SA940A	2SA949	<b>2SA950</b>	2SA965
<b>2SA966</b>	<b>2SA970</b>	<b>2SA1012</b>	2SA1013	2SA1015	2SA1020	2SA1048	2SA1091
2SA1145	2SA1150	2SA1160	2SA1162	2SA1163	2SA1182	2SA1203	2SA1204
2SA1213	2SA1241	2SA1263	<b>2SA1298</b>	2SA1300	2SA1315	2SA1321	2SA1349
2SA1356	2SA1357	2SA1358	2SA1359	2SA1362	2SA1408	2SA1803	2SA1837
2SA1892	2SA1932	2SA1939	2SA1940	2SA1941	<b>2SA1943</b>	2SB754	2SB834
2SB863	2SB1015	<b>2SB1375</b>	2SB1642	2SC380	2SC383	2SC388	2SC394
2SC399	2SC752	2SC784	2SC982	2SC1627	<b>2SC1815</b>	<b>2SC1923</b>	2SC1959
2SC2073A	2SC2120	2SC2216	<b>2SC2229</b>	2SC2230	2SC2235	<b>2SC2236</b>	<b>2SC2240</b>
<b>2SC2383</b>	2SC2458	<b>2SC2482</b>	<b>2SC2500</b>	2SC2551	<b>2SC2655</b>	2SC2668	2SC2669
2SC2705	2SC2710	<b>2SC2712</b>	2SC2714	2SC2873	2SC2878	2SC2884	2SC2982
2SC3074	2SC3120	2SC3123	2SC3136	2SC3180	<b>2SC3265</b>	2SC3266	2SC3267
2SC3295	2SC3303	2SC3328	2SC3333	2SC3376	2SC3378	2SC3419	2SC3420
2SC3421	2SC3422	<b>2SC3423</b>	2SC3602	2SC3606	2SC3607	2SC3620	2SC3621
2SC3666	2SC3671	2SC3884	2SC3885A	2SC4215	2SC4439	2SC4544	2SC4686A
2SC4973	2SC5048	2SC5129	2SC5148	2SC5149	2SC5171	2SC5174	2SC5196
2SC5197	2SC5198	<b>2SC5200</b>	2SC5331	2SC5339	2SC5386	2SC5387	2SC5404
2SC5411	2SC5587	2SD553	2SD633	2SD687	2SD1069	2SD1088	2SD1140
2SD1160	2SD1408	2SD1508	2SD1509	2SD1658	<b>2SD2012</b>	2SD2076	2SD2125
2SD2155	2SD2499	2SD2539	BC548	BF421	BF422	BF423	BF869

### 2SK , 2SJ Series

2SJ103	2SJ105	2SJ200	2SK30A	<b>2SK117</b>	2SK118	2SK161	<b>2SK170</b>
2SK192	2SK210	<b>2SK241</b>	2SK246	2SK302	2SK363	2SK365	2SK373
2SK389	2SK643	2SK850	2SK851	2SK889	2SK890	2SK891	2SK893
2SK942	2SK945	2SK1113	2SK1117	<b>2SK1118</b>	2SK1213	2SK1357	<b>2SK1358</b>
2SK1377	2SK1378	2SK1529	2SK1643	2SK2038	2SK2231	2SK2232	2SK2388

2SK2507	<b>2SK2545</b>	2SK2604	2SK2608	<b>2SK2610</b>	2SK2611	2SK2699	2SK2717
2SK2750	2SK2789	2SK2865	2SK2915	2SK2987	<b>2SC3376</b>	2SK3407	2SK3470

### Thyristors

SFOR3G42	SFOR5J43	SF8J48	SF25JZ51	SM1J43	SM3G48	SM8J48	SM25GZ51
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### IGBT

GT10G101	GT15Q101	GT20J301	GT25Q101	GT30J301	GT50J101	GT50J102	GT80J101
MG100J2YS50	MG100Q2YS50	MG150J2YS50	MG200J2YS50	MG300J2YS50	MG400Q2YS50	MG75J1BS11	MG800J1US51

### PhotoTransistor Output Devices

TLP250	TLP521	TLP531	TLP532	TLP620	TLP621	TLP627	TLP641
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# SONY

### OPTICAL PICK UP , CD MECHANISM & LOADER FOR CD, VCD & DVD

<b>KSS210A</b>	KSS210B	KSS212A	KSS212B	<b>KSS213B</b>	KSS213C	KSS213D	KSS213F
KSS213V	<b>KSS240A</b>	KSS540A	KSS542A	KSS620A	KSS720A	KSS880C	KMS260B
<b>KSM213CCM</b>	KSM213VCM	KSM260E	KSM440ACM	KSM440ADM	KSM440AEM	KSM620AAA	KSL2130CCM

### AM/FM RADIO I.C.

CXA1619BM	CXA1619BS	<b>CXA1691BM</b>	CXA1691BS				
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### FOR VCD & CD SERVO I.C.

CXA1782CQ	CXD2500BQ	CXA1821M	CXD2545Q	CXA2549M	CXD2585Q	CXA2581M	CXD3068Q
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# KEC

### KTA, KTB, KTC, KTD, KTK Series Transistor

#### 1. Audio Small Signal Transistor

Application	TO-92		TO-92M		SOT-23	
	PNP	NPN	PNP	NPN	PNP	NPN
General Purpose	KTA1266	KTC3198	KTA1267	KTC3199	KTA1504	KTC3875
	KTA1270	KTC3202	KTA1021	KTC1020	KTA1505	KTC3876
Low Noise Audio Amplifier	KTA1268	KTC3200			KTA1517	KTC3911
Low Frequency Amplifier	KTA1271	KTC3203	KTA1272	KTC3204		
Audio Muting		KTD1302		KTD1303		KTD1304

## 2. BC Series & Others

<b>BC327</b>	BC328	<b>BC337</b>	BC338	BC546	BC547	<b>BC548</b>	BC549
BC560	BC556	BC557	BC558	BC559	BC560	BC846	BC847
<b>BC848</b>	BC849	BC850	BC856	BC857	<b>BC858</b>	BC859	BC860
2N2222A	2N2907A	2N3904	2N3906	2N5401	2N5551	MPSA42	MPSA92
KTC8050	KTC8550	KTC9011	KTC9012	KTC9013	KTC9014	KTC9015	KTC9018

## 3. Built-in Bias Resistors (BRT) TRANSISTOR

TO-92M		V <sub>ceo</sub> (V)	I <sub>c</sub> (mA)	R1 (K ohm)	R2 (k ohm)	SOT-23	
PNP	NPN					PNP	NPN
KRA101M	KRC101M	50	100	4.7	4.7	KRA101S	KRC101S
KRA102M	KRC102M	50	100	10	10	KRA102S	KRC102S
KRA103M	KRC103M	50	100	22	22	KRA103S	KRC103S
KRA104M	KRC104M	50	100	47	47	KRA104S	KRC104S
KRA105M	KRC105M	50	100	2.2	47	KRA105S	KRC105S
KRA106M	KRC106M	50	100	4.7	47	KRA106S	KRC106S
KRA107M	KRC107M	50	100	10	47	KRA107S	KRC107S
KRA108M	KRC108M	50	100	22	47	KRA108S	KRC108S
KRA109M	KRC109M	50	100	47	22	KRA109S	KRC109S
KRA110M	KRC110M	50	100	4.7		KRA110S	KRC110S
KRA111M	KRC111M	50	100	10		KRA111S	KRC111S
KRA112M	KRC112M	50	100	100		KRA112S	KRC112S
KRA113M	KRC113M	50	100	22		KRA113S	KRC113S
KRA114M	KRC114M	50	100	47		KRA114S	KRC114S
KRA116M	KRC116M	50	100	1	10	KRA116S	KRC116S
KRA117M	KRC117M	50	100	2.2	2.2	KRA117S	KRC117S
KRA118M	KRC118M	50	100	2.2	10	KRA118S	KRC118S
KRA119M	KRC119M	50	100	4.7	10	KRA119S	KRC119S
KRA120M	KRC120M	50	100	10	4.7	KRA120S	KRC120S
KRA121M	KRC121M	50	100	47	10	KRA121S	KRC121S
KRA122M	KRC122M	50	100	100	100	KRA122S	KRC122S

## KIA Series I.C.

### 1. AUDIO I.C.

KIA6003S	KIA6040P	KIA6043S	KIA6057P	<b>KIA6210AH</b>	KIA6213S	<b>KIA6225S</b>	KIA6225P
KIA6258P	KIA6268P	KIA6269P	KIA6280H	KIA6281H	<b>KIS6282K</b>	<b>KIA6283K</b>	KIA6284P
KIA6299H	KIA6401P	KIA6402P	KIA62933S	<b>KIA7217AP</b>	KIA7657P	<b>KIA7042AP</b>	<b>KIA7045AF</b>

### 2. OP AMP ,COMPARATOR, Timer & Voltage Stabilizer I.C.

KIA324P	KIA339P	KIA358P	KIA393P	KIA555P	<b>KIA4558P</b>	KIA431A	KIA574
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### 3. Regulator I.C.

February 2003 edition

TO-220AB	KEC	KIA7805AP	KIA7806AP	KIA7808AP	KIA7809AP	KIA7812AP	KIA7815AP
	S.T	L7805CV	L7806CV	L7808CV	L7809CV	L7812CV	L7815CV
TO-220IS	KEC	KIA7805API	KIA7806API	KIA7808API	KIA7809API	KIA7812API	KIA7815API
TO-92L	KEC	KIA78L05BP	KIA78L06BP	KIA78L08BP	KIA78L09BP	KIA78L12BP	KIA78L15BP
SOT-89	KEC	KIA78L05BF	KIA78L06BF	KIA78L08BF	KIA78L09BF	KIA78L12BF	KIA78L15BF
TO-92L	KEC	KIA78S05P	KIA78S06P	KIA78S08P	KIA78S09P	KIA78S12P	KIA78S15P

KEC also provide the same Package in 79 series.

#### 4. Voltage Detector I.C - CPU Reset

OP VOLT.	1.9V	2.5V	2.9V	3.1V	3.9V	4.2V	4.5V
LOW VOLT.	KIA7019AP	KIA7025AP	KIA7029AP	KIA7031AP	<b>KIA7039AP</b>	<b>KIA7042AP</b>	KIA7045AP
HIGH VOLT.	KIA7419AP	KIA7425AP	KIA7429AP	KIA7431AP	KIA7439AP	<b>KIA7442AP</b>	KIA7445AP

KEC also provide the same series in SOT-89 as KIA7000AF or KIA7400AF e.g KIA7042AF

## HITACHI

#### Operational Amplifier & Timer IC

HITACHI	HA17324	HA17339	HA17358	HA17393	HA17555	HA17558	HA17741
KEC	KIA324P	KIA339P	KIA358P	KIA393P	KIA555P	KIA4558P	
Others	LM324N	LM339N	LM358N	LM393N	NE555	NJM4558D	UA741

#### Audio IC

HA11235	HA11423	HA13119	HA13127	HA13128	HA13150A	HA13151	HA13155
HA13157	<b>HA13158A</b>	HA13431					

#### HC & LS Series

HD74LS00P	HD74LS74P	HD74LS138P	HD74HC00P	HD74HC04P	HD74HC08P	HD74HC114P	HD74HC132P
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#### 2SA, 2SB, 2SC, 2SD SERIES

2SA673	2SA844	2SA1029	2SB1109	2SB561	2SB562	2SB647	2SB649
2SB716	2SC1061	2SC1213	2SC1214	2SC1775	2SC1906	2SC1907	2SC458
2SC460	2SC4928	2SC535	2SD1138	2SD1609	2SD438	2SD667	2SD669

#### Power MOSFET

2SJ162	2SK1058	2SJ352	2SK2221				
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## Fairchild

KSA992	KSA928	KSA1013	KSC1008	KSC1674	KSC1730	KSC1845	KSC2001
KSC2328	KSC2331	KSC2335	KSC2383	KSC5802			
KA2206CN	KA2209B	KA2213	KA22130	KA22425D	KA22426D	KA22427C	KA22429

### STK Series

STK0025	STK1070II	STK401-030	STK402-930	STK4048XI	STK412II	STK4216X	STK4843
STK0029	STK1080II	STK401-040	STK402-940	STK405-010	STK4121V	STK4219II	STK4853
STK0030	STK2025	STK401-050	STK402-950	STK405-010A	STK4121X	STK4220II	STK4863
STK0039	STK2028	STK401-051	STK4030	STK405-030	STK412-210	STK4221II	STK488-010
STK0040	STK2029	STK401-060	STK4030II	STK405-030A	STK4122II	STK4221V	STK488-020
STK0040II	STK2030	STK401-070	STK4030V	STK405-050	STK4131II	STK4229II	STK488-050
STK0049	STK2038	STK401-080	STK4030XI	STK405-050A	STK4131V	STK4230II	STK4893
STK0050	STK2040	STK401-090	STK4032	STK405-070	STK4131X	STK4231II	STK490-040S
STK0050II	STK2050	STK401-100	STK4032II	STK405-070A	STK4132II	STK4231V	STK4903
STK0059	STK2125	STK401-110	STK4032V	STK405-090	STK413H	STK4231V	STK4913
STK0060	STK2129	STK401-120	STK4032X	STK405-090A	STK413S	STK4239II	STK496-070
STK0060II	STK2135	STK401-130	STK4032XI	STK4050II	STK4141II	STK4241II	STK496-230
STK0070	STK2139	STK401-140	STK4034	STK4050V	STK4141V	STK4241V	STK496-240
STK0070II	STK2145	STK401-210	STK4034II	STK4050X	STK4141X	STK4273	STK496-250
STK0080	STK2230	STK401-220	STK4034V	STK4050XI	STK4142II	STK4274	STK496-260
STK0080II	STK2240	STK401-230	STK4034X	STK405-100	STK4151II	STK4278	STK561F
STK013K	STK2250	STK401-240	STK4034XI	STK405-100A	STK4151V	STK4278L	STK5633
STK014	STK2260	STK401-250	STK4036	STK405-110	STK4151X	STK430	STK563F
STK021	STK3041	STK401-260	STK4036II	STK405-110A	STK4152II	STK4301	STK583F
STK025	STK3042IIA	STK401-270	STK4036V	STK405-120	STK4159II	STK4311	STK6325A
STK032	STK3042III	STK401-280	STK4036X	STK405-120A	STK415H	STK4332	STK730-010
STK036	STK3062IIA	STK401-290	STK4036XI	STK407-020	STK415S	STK435	STK730-020
STK040	STK3062III	STK401-300	STK4038II	STK407-030	STK4161II	STK4352	STK730-030
STK041	STK3082IIA	STK401-310	STK4038V	STK407-040	STK4161V	STK436	STK730-040
STK043	STK3082III	STK401-320	STK4038X	STK407-040B	STK4161X	STK436-105	STK730-050
STK054	STK3102IIA	STK401-330	STK4038XI	STK407-040E	STK4162II	STK4362	STK730-060
STK055	STK3102III	STK401-340	STK4040	STK407-050	STK4169II	STK437	STK730-070
STK056	STK3122III	STK402-020	STK404-050	STK407-050B	STK4171II	STK4372	STK730-080
STK057	STK3152III	STK402-030	STK404-070	STK407-050E	STK4171V	STK4382	STK730-090
STK058	STK350-230	STK402-040	STK404-090	STK407-070	STK4171X	STK439	STK730-120
STK060	STK391-020	STK402-050	STK404-090S	STK407-070B	STK4172II	STK4392	STK730-130
STK075	STK391-110	STK402-070	STK4040II	STK407-070E	STK4176X	STK4402	STK730-140
STK075G	STK391-110S	STK402-071	STK4040V	STK407-090	STK4179II	STK441	STK730-150
STK077	STK392-010	STK402-071N	STK4040X	STK407-090B	STK4181II	STK441-105	STK730-160
STK077G	STK392-020	STK402-090	STK4040XI	STK407-090E	STK4181V	STK4412	STK730-170
STK078	STK392-040	STK402-090S	STK404-100	STK407-100	STK4181X	STK442-110	STK730-180
STK078G	STK392-110	STK402-100	STK404-120	STK407-110	STK4182II	STK442-110I	STK7308

STK080	STK392-150	STK402-120	STK404-130	STK407-110E	STK4186X	STK442-120	STK7309
STK080G	STK400-010	STK402-220	STK404-130S	STK407-120	STK4189II	STK442-130	STK7310
STK082	STK400-020	STK402-230	STK404-140	STK407-120E	STK419-140	STK443	STK73410
STK082-105	STK400-030	STK402-240	STK4042II	STK407-240	STK4191II	STK443-020	STK73410II
STK082G	STK400-040	STK402-250	STK4042V	STK407-240	STK4191V	STK4432	STK7348
STK084	STK400-050	STK402-270	STK4042VL	STK407-250	STK4191X	STK457	STK7358
STK084G	STK400-060	STK4024	STK4042XI	STK407-270	STK4192II	STK459	STK7359
STK086	STK400-070	STK4024II	STK4044II	STK407-290	STK4192II	STK460	STK73902
STK086G	STK400-090	STK4024V	STK4044V	STK407-290K	STK4196X	STK4601II	STK73903
STK1030	STK400-220	STK4024XI	STK4044VL	STK408-040B	STK4199II	STK461	STK73904
STK1035	STK400-230	STK4026	STK4044X	STK4101II	STK4200II	STK4611II	STK73905
STK1039	STK400-240	STK4026II	STK4044XI	STK4101V	STK4201II	STK4621II	STK73906
STK1040	STK400-250	STK4026V	STK4046II	STK4102II	STK4201V	STK463	STK73907
STK1045	STK400-260	STK4026XI	STK4046V	STK4111II	STK4201X	STK4631II	STK73907T
STK1049	STK400-270	STK4028	STK4046VL	STK4111V	STK4206X	STK465	STK73908
STK1050	STK400-280	STK4028II	STK4046X	STK411-230E	STK4209II	STK4773	STK73909
STK1050II	STK400-290	STK4028V	STK4046XI	STK4112II	STK4210II	STK4793	STK7573A
STK1059	STK400-490	STK4028X	STK4048II	STK411-550G	STK4211II	STK4803	
STK1060	STK401-010	STK4028XI	STK4048V	STK412-010J	STK4211V	STK4813	
STK1060II	STK401-020	STK402-920	STK4048X	STK412-030	STK4211X	STK4833	

## SANYO

2SA608	2SA1207	2SB817	2SC526	2SC930	2SC3150	2SC3502	2SC3645
2SD1047	2SD1650	2SD1877	2SD1878	2SD1902	2SD1913	2SD313	2SD600
LA1137N	LA1205	LA1222	LA1245	LA1600	LA1851N	LA3335	LA3376
LA3600	LA4192	LA4440	LA4508	LA4550	LA4555	LA4597	LA7520N
LA7830	LA7837	LA7910	LB1641	LC7385M	LC7515	LC7517	LC89960

## PMC

### MT-200

PMA1215	PMA1216	PMA1295	PMA1494	PMC2922	PMC3857	PMC3858	
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### TO-126

BD135-16	BD136-16	BD137-16	BD138-16	BD139-16	BD140-16	MJE13003	
PMB772	PMB649	PMD669	PMD882				

### TO-18

2N2222A	2N2646	2N2647					
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### TO-220AB

PMA1011	PMA1012	PMA473	PMA671	PMA769	PMA940	PMA968	
PMB507	PMB511	PMB546	PMB553	PMB595	PMB596	PMB598	PMB633
PMB824	PMB825	PMC834					
PMC1061	PMC1173	PMC1625	PMC1983	PMC2073	PMC2075	PMC2078	PMC2233
PMC2238	PMC2275	PMC2335	PMC2344	PMC3148	PMC3150	PMC4106	PMC4242
PMD1062	PMD1128	PMD235	PMD288	PMD313	PMD389	PMD525	PMD526
PMD553	PMD560	PMD880					
BD241	BD242	BD243	BD244	BD245	BD907	BD908	
BU406	BU407	BU408	BU806	BU807	BUT11A	BUT12A	
BUV46A	BUV47A	BUV48A	BUX84	<b>H1061</b>			
MJE13003	MJE13005	MJE13007	MJE13009	MJE2955T	MJE3055T		
TIP110	TIP112	TIP117	TIP120	TIP122	TIP125	TIP126	TIP127
TIP142T	TIP147T	TIP29	TIP30	TIP31	TIP32		
PIC7805	PIC7806	PIC7808	PIC7809	PIC7812	PIC7815	PIC7824	
PIC7905	PIC7906	PIC7908	PIC7909	PIC7912	PIC7915	PIC7924	

### TO-220IS

PMA1306	PMA1307	PMB1016	PMB1133	PMB1626	PMB945		
PMC3298	PMC3309	PMC3310	PMC3795	PMC3973	PMC4161	PMC4369	
PMD1271	PMD1273	PMD1274	PMD1275	PMD1276	PMD1413A	PMD2061	
BUT11AF	BUT12AF						

### TO-3PL

PMA1301	PMA1302	PMC3280	PMC3281	PMC3995	PMC4288A		
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### TO-3

2N3055	MJ2955	2N3771	2N3772	2N3773	3DD200		
PMB337	PMB681						
PMC1114	PMC1116	PMC1413A	PMC1454	PMC1875	PMC1942		
PMD200	PMD350	PMD820	PMD838	PMD850	PMD868	PMD869	
PMD870	PMD898	PMD1168	PMD1175	PMD1279			
BU208A	BU208D	BU326A					

### TO-3PH

PMD1425	PMD1426	PMD1427	PMD1428	PMD1431	PMD1432	PMD1433	
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### TO-3PM

PMB778							
PMC3505	PMC3679	PMC3886A	PMC3892	PMC3895	PMC4123	PMC4300	PMC4429
PMC5148	PMC5149						
PMD1497	PMD1541	PMD1545	PMD1546	PMD1547	PMD1548	PMD1554	PMD1555
PMD1556	PMD1649	PMD1652	PMD1711	PMD1876	PMD1877	PMD1879	PMD1880
PMD1881	PMD1883	PMD1884	PMD1885	PMD1886	PMD1887	PMD2253	PMD998
BU508AF	BU508DF	S2000AF	S2055AF				

### TO-3PI

PMA1105	PMA1106	PMA1186	PMA1264	PMA1265	PMA1303	PMA1490	PMA1491
PMA1492	PMA1516	PMA1633					
PMB686	PMB688	PMB816	PMB817				
PMC2555	PMC2577	PMC2625	PMC3042	PMC3089	PMC3153	PMC3181	PMC3182
PMC3262	PMC3263	PMC3284	PMC3466	PMC3552	PMC3688	PMC3855	PMC3856
PMC3907	PMC4278	PMC4927					
PMD1046	PMD1047	PMD1148	PMD1294	PMD1397	PMD1398	PMD1402	PMD1439
PMD1441	PMD1641	PMD716	PMD717	PMD718			
BU426A	BU826	S2000N	S2055N	TIP2955	TIP3055	TIP3055	

### TO-92

2N3904	2N3906	PMC3355	BC327	BC328	BC337	BC338	
BC547	BC548	BC549	BC550	BC557	BC558	BC559	BC560
PIC78L05	PIC78L06	PIC78L08	PIC78L09	PIC78L12	PIC79L05	TL431-C	

## Stock items for other brands

### OTHER CD, VCD OPTICAL PICK UP

<b>VAM1202</b>	PHILIPS	VAM2103	PHILIPS	<b>SF-90</b>	SANYO	SF-91	SANYO
SFC-93AQ	SANYO	SFP-1	SANYO	SFP-100	SANYO	SFP-101	SANYO
SFP-151	SANYO	SOH-AA	SAMSUNG	SOH-AP	SAMSUNG	H8134AF	SHARP
<b>H8147AF</b>	SHARP	H8151AF	SHARP	H8173AF	SHARP	HPC 1MX	SHARP
OPTIMA-150	JVC	OPTIMA-6S	JVC	OPTIMA-610	JVC	<b>OPTIMA-7C</b>	JVC
OPTIMA-7S	JVC	<b>OPTIMA-720</b>	JVC	OPTIMA-725	JVC		

### NEC

2SB772	2SB882	2SC3355	2SC3356	UPC1237HA	UPC1313HA	UPC1490HA	UPC4558C
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### SGS-Thomson

TDA2003V	TDA2004R	TDA2005R	TDA2030AV	ST13005	BUT11AF	L7805CV	L7812CV
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### SANKEN

2SA1668	2SA1694	2SA1695	2SC3284	2SC3853	2SC4382	2SC4467	2SC4468
STR50092	STR50113	STR54041	STR59041	STR81145A	STRS5707	STRS6707	STR51041

### Philips

BU508AF	BU508DF	BU2508AX	BU2508DX	BU2520AF	BU2520DF	BU4516AF	BUT11AX
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### Rohm

2SA933	2SA937	2SA1964	2SB1238	2SB1240	2SB1243	2SB1342	2SC1740
2SC2060	2SC2061	2SC3377	2SC5248	2SD1858	2SD1933	2SD2061	2SD2144
BA4220	BA4558	BA5406	BA5417	BA6209	BA6220	BA6238	BA6398FP

### Panasonic

2SA683	2SA684	2SA1123	2SC828	2SC829	2SC1318	2SC1383	2SC1384
AN5150	AN5512	AN5515	AN5521	AN6651	AN7112E	AN7148	AN7161N