

T-27-01

Applications	Type No		Maximum Ratings			Electrical Characteristics (Ta = 25°C)											Package	
			V _{CEO} (V)	I _C (mA)	P _C (mW)	h _{FE}	(MIN)		MAX		f _T (MHz)	(TYP) MIN		NF (dB)	MAX			
	V _{CE} (V)	I _C (mA)					V _{CE(sat)} (V)	I _C (mA)	I _B (mA)	V _{CE} (V)		I _C (mA)	V _{CE} (V)		I _E (mA)	f (MHz)	R _g (Ω)	
	NPN	PNP																Fig
	2SC3880S	—	30	20	100	40~200	6	1	—	—	—	—	—	—	—	—	—	F1
	2SC3195	—	30	20	100	40~200	6	1	—	—	—	—	—	—	—	—	—	F5
	2SC3194	—	30	20	100	25~140	6	1	—	—	—	—	—	—	—	—	—	F3
FM/RF, MIX OSC	KTC9016	—	30	20	200	40~198	5	1	—	—	—	—	—	—	—	—	—	F3
	KTC9018	—	30	20	200	40~198	5	1	—	—	—	—	—	—	—	—	—	F3
	BFS99	—	25	25	200	(40)	10	7	—	—	—	—	—	—	—	—	—	F1
	BFS20	—	25	25	200	(40)	10	7	—	—	—	—	—	—	—	—	—	F1
FM-IF/AF-IF	2SC3879S	—	30	50	150	40~240	12	2	0.4	10	1	100	10	1	±27~33	—	—	F1
	2SC3193	—	30	50	200	40~240	12	2	0.4	10	1	100	10	1	±27~33	—	—	F5
	2SC3192	—	30	50	300	40~240	12	2	0.4	10	1	100	10	1	±27~33	—	—	F3
	KTC9011	—	30	50	400	40~198	5	1	0.4	10	1	100	10	1	—	—	—	F3
AM RF	2SC3878S	—	30	100	150	40~240	12	2	0.4	10	1	80	10	2	3.5	10	—	F1
	2SC3191	—	30	100	200	40~240	12	2	0.4	10	1	80	10	2	3.5	10	—	F5
	2SC3190	—	30	100	400	40~240	12	2	0.4	10	1	80	10	2	3.5	10	—	F3

*: I_E *; C_{BE} *; V_{CE}

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		Maximum Ratings				Electrical Characteristics										
		V _{CE} (V)	I _C (mA)	P _C (mW)	h _{FE}	V _{CE} (sat)		f _T		G _{RE}		MAX		Package		
						V _{CE} (V)	I _C (mA)	V _{CE} (V)	I _C (mA)	V _{CE} (V)	I _C (mA)	V _{CE} (V)	f (MHz)			
VHF RI	KTC2348	30	20	250	20~200	10	2	—	—	400	2	20~28	10	0	0	F3
	2SC3882S	15	50	150	40~200	3	8	—	—	650	8	*1.3	*10	—	1	F1
VHF OSC	KTC2349	15	50	250	(20)	3	8	—	—	600	8	*1.5	*10	—	1	F3
	BFQ31	15	100	200	(20)	3	3	0.4	10	600	4	*1.7	*10	—	1	F1
UHF OSC, UHF MIX	KTC2347	15	50	250	(20)	3	8	—	—	650	8	*1.5	*10	—	1	F3
	KTC3120S	15	50	150	40~200	10	5	—	—	1,500	2	*0.9	10	—	800	F1
UHF OSC	KTC3121S	15	50	150	60~120	3	8	—	—	1,100	8	*1.3	*10	—	1	F1

V _A PFI	2SC3881S	25	50	150	20~200	150	20~200	10	10	0.2	15	1.5	250	10	10	*1.6	*10	—	1	SOT-23
	2SC3196	40	50	250	(30)	250	(30)	10	4	—	—	—	400	10	4	32~40	12	4	1	TO-92(C)
	2SC3197	35	50	300	20~200	300	20~200	12.5	12.5	0.2	15	1.5	300	12.5	12.5	28~36	12.5	12.5	45	TO-92(C)

*C_{GB}, *C_{CE}, *V_{CE}

Applications	Type No		Maximum Ratings				Electrical Characteristics (Ta = 25°C)										Package		
			V _{CEO} (V)	I _C (A)	P _C (W)	h _{FE}	V _{CE} (sat)		MAX		TYP		C _{ob} (PF)	TYP					
	V _{CE} (V)	I _C (mA)					I _C (mA)	I _B (mA)	V _{CE} (V)	I _C (mA)	V _{CE} (V)	I _C (mA)		V _{CE} (V)	f (MHz)				
	NPN	PNP																Fig	
TV Vertical Output	2SC3205	2SA1273	30	2	1	100~320	2	500	2.0	1.5A	30	120	2	500	30	10	1	TO-92L	F4
	2SC4369	2SA1658	30	1	1.5	40~400	2	500	0.8	2A	0.2A	100	2	500	35	10	1	TO-220IS	F7
	2SC4368	2SA1657	150	1.5	20	40~140	10	500	1.5	500	50	4	10	500	35	10	1	TO-220IS	F7
	2SD2058A	—	60	3	25	60~300	5	500	1.0	3A	0.3A	3.0	5	500	70	10	1	TO-220IS	F7
	—	2SB1366	60	3	25	60~300	5	500	1.0	3A	0.3A	9	5	500	150	10	1	TO-220IS	F7
	2SC3230	2SA1276	30	3	10	70~240	2	500	0.8	2A	0.2A	100	2	500	35	10	1	TO-220AB	F6
	2SD1351A	—	60	3	25	60~300	5	500	1.0	3A	0.3A	3.0	5	500	70	10	1	TO-220AB	F6
	—	2SB988	60	3	30	60~200	5	500	1.0	3A	0.3A	9	5	500	150	10	1	TO-220AB	F6
	KTC2073	KTA940	150	1.5	25	40~140	10	500	1.5	500	50	4	10	500	35	10	1	TO-220AB	F6

* Under Development

Applications	Type No	Electrical Characteristics (Ta=25°C)												Package				
		Maximum Ratings			h _{FE}	(MIN)		V _{CE(sat)} (V)	MAX		f _T (MHz)	Cob (pF)	(TYP) MAX					
		V _{CE} (V)	I _C (A)	P _C (W)		V _{CE} (V)	I _C (mA)		V _{CE} (V)	I _C (mA)			f (MHz)					
TV Horizontal Output	NPN	PNP																
	2SC3231	—	60	4	*40	30~150	5	1A	1.0	4A	0.4A	5	0.5A	—	—	—	TO-220AB	
	KTC2233H	—	60	4	*35	30~150	5	1A	1.0	4A	0.4A	5	0.5A	—	—	—	TO-220IS	
	KTD1069	—	150	7	*40	(110)	1.5	5A	1.5	5A	0.5A	10	0.2A	—	—	—	TO-220AB	
	*KTD1427	—	600	5	*80	(8)	5	1A	5	4A	0.8A	10	0.1A	(165)	1	1	TO-3PH(BS)	
	KTD1554	—	600	3.5	*40	(8)	5	0.5A	8	3A	0.8A	10	0.1A	(95)	1	1	TO-3P(S)	
	KTD1555	—	600	5	*50	(8)	5	1A	5	4A	0.8A	10	0.1A	(165)	1	1	TO-3P(S)	
*BU508A	—	700	8	*60	—	—	—	—	1	4.5A	2A	5	0.1A	(125)	1	1	TO-3P(S)	
Video Output	2SC3206	KTA949	150	0.05	0.8	70~240	5	10	0.5	10	1	10	10	5	10	1	TO-92L	
	2SC3207	—	300	0.1	0.9	(20)	10	4	1.0	10	1	50	10	20	20	1	TO-92L	
	2SC3229	—	300	0.05	1.5	(20)	10	0.5	1.0	10	1	75	20	20	4.0	20	1	TO-202
	2SC3208	—	300	0.15	*12.5	40~170	10	50	1.0	100	20	40	10	30	6.5	50	1	TO-220AB
	KTC15691	—	300	0.15	*12.5	40~170	10	50	1.0	100	20	100	10	30	5.0	50	1	TO-220IS
	TV Sound Output	2SC3203	2SA1271	30	0.8	0.6	100~320	1	100	0.5	500	20	(120)	5	10	(13)	10	1
2SC3228		2SA1275	160	1	0.9	60~320	5	200	1.5	500	50	20	5	200	20	10	1	TO-92L
2SC3205		2SA1273	30	2	1	100~320	2	500	2.0	1.5A	30	(120)	2	500	(30)	10	1	TO-92L
2SC4369		2SA1658	30	3	*15	40~400	2	500	0.8	2A	0.2A	(100)	2	500	(35)	10	1	TO-220IS
2SD2058A		—	60	3	*25	60~300	5	500	1.0	3A	0.3A	(3.0)	5	500	(70)	10	1	TO-220IS
—		2SB1366	60	3	*25	60~300	5	500	1.0	3A	0.3A	(9)	5	500	(150)	10	1	TO-220IS
2SC3230		2SA1276	30	3	*10	70~240	2	500	0.8	2A	0.2A	(100)	2	500	(35)	10	1	TO-220AB
2SD1351A		—	60	3	*25	60~300	5	500	1.0	3A	0.3A	(3.0)	5	500	(70)	10	1	TO-220AB
—		2SB988	60	3	*30	60~200	5	500	1.0	3A	0.3A	(9)	5	500	(150)	10	1	TO-220AB
KTC2230		—	160	0.1	0.8	120~400	10	10	0.5	50	5	50	10	10	7.0	10	1	TO-92L
KTC2230A		—	180	0.1	0.8	120~400	10	10	0.5	50	5	50	10	10	7.0	10	1	TO-92L
KTC2231		—	160	0.2	*12	100~320	10	50	1.0	200	20	50	10	50	10	1	1	TO-202
KTC2231A		—	180	0.2	*12	100~320	10	50	1.0	200	20	50	10	50	10	1	1	TO-202
KTC2483		—	160	1.5	*15	100~320	5	200	1.0	500	50	40	5	200	20	10	1	TO-202

Pc*:Tc=25°C

Applications	Type No		Electrical Characteristics (Ta = 25°C)													Package			
			Maximum Ratings			h _{FE}	V _{CE(sat)}		MAX		f _T	TYP		C _{ab}	TYP				
	V _{CEO} (V)	I _C (A)	P _C (W)	V _{CE} (V)	I _C (mA)		I _B (mA)	V _{CE} (V)	I _C (mA)	V _{CE} (V)		f (MHz)							
	NPN	PNP														Fig			
27MHz Drive/Output	KTC2036A	—	80	1	1.2	100	2	150	0.7	500	20	150	10	300	12	10	1	TO-202	F8
	KTC2075	—	80	4	1.10	25	5	0.5A	1.5	3A	0.3A	100	5	300	40	V _{CE1} = 10	1	TO-229AB	F6
High & Low V _{CE(sat)}	KTC3112	—	50	0.15	0.4	600~3600	6	2	0.25	100	10	250	10	10	3.5	10	1	TO-92L	F3
	KTD1582	—	50	1	1	800~3200	5	0.3A	0.3	0.5A	5	250	10	10	18	10	1	TO-92L	F4
Strobe Flash	2SC3226	—	10	2	0.9	140~600	1	0.5A	0.5	2A	50	150	1	0.5A	27	10	1	TO-92L	F4
	2SC4377	—	30	2	*1	140~600	1	0.5A	0.5	2A	50	150	1	0.5A	27	10	1	SOT-89	F2
	—	KTA1242	20	5	*10	100~320	2	0.5A	1	4A	0.1A	170	2	0.5A	62	10	1	SMDP-3	F13
Mating	*KTC2878	—	20	0.3	0.4	200~1200	2	4	0.3	30	3	30	6	4	4.8	10	1	TO-92(C)	F2

Pc: Ta = 25°C Pc*: mounted on ceramic substrate (250mm² × 0.8)