

Applications	Type No		Maximum Ratings			Electrical Characteristics (Ta=25°C)												Package					
			NPN		PNP		V _{CE0} (V)	I _C (mA)	P _C (mW)	h _{FE}	(MIN)		MAX		f _T (MHz)	(TYP) MIN				NF (dB)	MAX		
	NPN	PNP	V _{CE} (V)	I _C (mA)	V _{CE(sat)} (V)	I _C (mA)					I _B (mA)	V _{CE} (V)	I _C (mA)	I _E (mA)		f (MHz)	R _B (Ω)						
FM/RF, MIX OSC	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
	BF599	—	25	25	200	(40)	10	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	F1
FM-IF/AF-IF	BF520	—	25	25	200	(40)	10	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	F1
	2SC3879S	—	30	50	150	40~240	12	2	0.4	10	100	10	1	27~33	6	-1	10.7	50	SOT-23	—	—	—	F1
	2SC3193	—	30	50	200	40~240	12	2	0.4	10	100	10	1	27~33	6	-1	10.7	50	TO-92(M)	—	—	—	F5
FM-IF/AF-IF	2SC3192	—	30	50	300	40~240	12	2	0.4	10	100	10	1	27~33	6	-1	10.7	50	TO-92(C)	—	—	—	F3
	KTC9011	—	30	50	400	40~198	5	1	0.4	10	100	10	1	—	—	—	—	—	TO-92(B)	—	—	—	F3
	2SC3878S	—	30	100	150	40~240	12	2	0.4	10	80	10	2	3.5	10	-1	1	50	SOT-23	—	—	—	F1
AM RF	2SC3191	—	30	100	200	40~240	12	2	0.4	10	80	10	2	3.5	10	-1	1	50	TO-92(M)	—	—	—	F5
	2SC3190	—	30	100	400	40~240	12	2	0.4	10	80	10	2	3.5	10	-1	1	50	TO-92(C)	—	—	—	F3

*: I_B *: G_{FE} *: V_{CE}

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

1A PFI	2SC3881S	—	25	50	150	20~200	10	10	0.2	15	1.5	250	10	10	*1.6	*10	—	1	SOT-23
	2SC3196	—	40	50	250	(30)	10	4	—	—	—	400	10	4	32~40	12	4	1	TO-92(C)
	2SC3197	—	25	50	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_{ob}, *C_{ce}, *V_{CE}

Applications	Type No		Maximum Ratings					Electrical Characteristics (Ta = 25°C)											Package	
			Maximum Ratings					Electrical Characteristics (Ta = 25°C)												
	NPN	PNP	V _{CE0} (V)	I _C (A)	P _C (W)	h _{FE}	h _{FE}		V _{CE(sat)} (V)	MAX		f _T (MHz)	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)	
1V 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	1	2.5	60~300	5	500	1.0	3A	0.3A	3.0	5	500	70	10	1	TO-220IS	F7	
	—	2SB1366	60	1	2.5	60~300	5	500	1.0	3A	0.3A	9	5	500	150	10	1	TO-220IS	F7	
	2SC3230	2SA1276	30	1	10	70~240	2	500	0.8	2A	0.2A	100	2	500	35	10	1	TO-220AB	F6	
	2SD1351A	—	60	1	2.5	60~300	5	500	1.0	3A	0.3A	3.0	5	500	70	10	1	TO-220AB	F6	
	—	2SB988	60	1	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	

Applications	Type No		Maximum Ratings										Electrical Characteristics (Ta=25°C)										Package																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
			V _{CE} (V)			I _C (A)			P _C (W)			h _{FE}	h _{FE}		V _{CE} (sat)		I _C (mA)		f _T (MHz)	V _{CE} (V)		I _C (mA)			Cob (pF)	(TYP) MAX																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	NPN	PNP	V _{CE} (V)	I _C (A)	P _C (W)	h _{FE}	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)	I _C (mA)	f _T (MHz)		V _{CE} (V)	f _T (MHz)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

P_C: T_C = 25°C

Applications	Type No	Electrical Characteristics (T _a = 25°C)													Package			
		Maximum Ratings				V _{CE} (sat)				f _T		TYP		C _{ob} (pF)			TYP	
		V _{CEO} (V)	I _C (A)	P _C (W)	h _{FE}	V _{CE} (V)	I _C (mA)	I _B (mA)	f _T (MHz)	V _{CE} (V)	I _C (mA)							
												V _{CE} (V)	I _C (mA)					I _B (mA)
27MHz Drive/Output	KTC2036A	80	1	1.2	100	2	150	0.7	500	20	150	10	100	12	10	1	TO-202	F8
	KTC2075	80	4	1.10	25	5	0.5A	1.5	3A	0.3A	100	5	500	40	V _{CE} = 10	1	TO-220AB	16
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	13
	KTD1582	50	1	1	800~3200	5	0.3A	0.3	0.5A	5	250	10	10	18	10	1	TO-92L	14
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	1.1	140~600	1	0.5A	0.5	2A	50	150	1	0.5A	27	10	1	SOT-89	F2
	—	20	5	1.10	100~320	2	0.5A	1	4A	0.1A	170	2	0.5A	62	10	1	SMIP-3	F13
Mixing	*KTC2878	20	0.3	0.4	200~1200	2	4	0.3	30	3	30	6	4	4.8	10	1	TO-92(C)	F3

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