

* Under Development

Applications	Type No		Electrical Characteristics (Ta = 25°C)										Package							
	NPN	PNP	Maximum Ratings					Electrical Characteristics (Ta = 25°C)					Cob (pF)	(TYP) MAX V _{CB} (V)	f (MHz)	Fig				
			V _{CEO} (V)	I _C (A)	P _C (W)	h _{FE}	V _{CE} (V)	I _C (mA)	f _T (MHz)	V _{CE} (V)	I _C (mA)	f _T (MHz)								
TV Horizontal Output	25C3231	—	60	4	*40	30~150	5	1A	1.0	4A	0.4A	(8)	5	0.5A	—	—	TO-220AB	F6		
	KTC223H	—	60	4	*35	30~150	5	1A	1.0	4A	0.4A	(8)	5	0.5A	—	—	TO-220IS	F7		
	KTD1069	—	150	7	*40	(10)	1.5	5A	1.5	5A	0.5A	(18)	10	0.2A	—	—	TO-220AB	F6		
	*KTD1427	—	600	5	*80	(8)	5	1A	5	4A	0.8A	(3)	10	0.1A	(165)	10	1	TO-3P(H)BS	F10	
	KTD1554	—	600	3.5	*40	(8)	5	0.5A	8	3A	0.8A	(3)	10	0.1A	(95)	10	1	TO-3P(IS)	F11	
	KTD1555	—	600	5	*50	(8)	5	1A	5	4A	0.8A	(3)	10	0.1A	(165)	10	1	TO-3P(IS)	F11	
	*BU508A	—	700	8	*60	—	—	—	—	1	4.5A	2A	(7)	5	0.1A	(125)	10	1	TO-3P(IS)	F11

Video Output	25C3206	KTA949	150	0.05	0.8	70~240	5	10	0.5	10	1	(120)	30	10	5	10	1	TO-92L	F4
	25C3207	—	300	0.1	0.9	(20)	10	4	1.0	10	1	50	10	20	(3.0)	20	1	TO-92L	F4
	25C3229	—	300	0.05	1.5	(20)	10	0.5	1.0	10	1	75	20	20	4.0	20	1	TO-202	F8
	25C3208	—	300	0.15	*12.5	40~170	10	50	1.0	100	20	40	10	30	6.5	50	1	TO-120AB	F6
	KTC15691	—	300	0.15	*12.5	40~170	10	50	1.0	100	20	100	10	30	5.0	50	1	TO-220S	F7

TV Sound Output	25C3203	25A1271	30	0.8	0.6	100~320	1	100	0.5	500	20	(120)	5	10	(13)	10	1	TO-92(C)	F3
	25C3228	25A1275	160	1	0.9	60~320	5	200	1.5	500	50	20	5	200	20	10	1	TO-92L	F4
	25C3205	25A1273	30	2	1	100~320	2	500	2.0	1.5A	30	(120)	2	500	(30)	10	1	TO-92L	F4
	25C4369	25A1658	30	3	*15	40~400	2	500	0.8	2A	0.2A	(100)	2	500	(35)	10	1	TO-220IS	F7
	25D2058A	—	60	3	*25	60~300	5	500	1.0	3A	0.3A	(3.0)	5	500	(70)	10	1	TO-220IS	F7
	—	25B1366	60	3	*25	60~300	5	500	1.0	3A	0.3A	(9)	5	500	(150)	10	1	TO-220IS	F7
	25C3230	25A1276	30	3	*10	70~240	2	500	0.8	2A	0.2A	(100)	2	500	(35)	10	1	TO-220AB	F6
	25D1351A	—	60	3	*25	60~300	5	500	1.0	3A	0.3A	(3.0)	5	500	(70)	10	1	TO-220AB	F6
	—	25B988	60	3	*30	60~200	5	500	1.0	3A	0.3A	(9)	5	500	(150)	10	1	TO-220AB	F6
	KTC2230	—	160	0.1	0.8	120~400	10	10	0.5	50	5	50	10	10	7.0	10	1	TO-92L	F4
	KTC2230A	—	180	0.1	0.8	120~400	10	30	0.5	50	5	50	10	10	7.0	10	1	TO-92L	F4
	KTC2231	—	160	0.2	*12	100~320	10	50	1.0	200	20	50	10	50	10	10	1	TO-202	F8
	KTC2231A	—	180	0.2	*12	100~320	10	50	1.0	200	20	50	10	50	10	10	1	TO-202	F8
	KTC2483	—	160	1.5	*15	100~320	5	200	1.0	500	50	40	5	200	20	10	1	TO-202	F8

Pc: Tc = 25°C

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Applications	Type No		Maximum Ratings Tc=25°C				Electrical Characteristics (Ta=25°C)										Package	Fig				
	NPN	PNP	V _{CEO} (V)	I _C (A)	P _C (W)	h _{FE}	(MIN)		MAX		V _{CE(sat)}		V _{BE(sat)}		MAX				SW time (TYP) MAX			
							V _{CE} (V)	I _C (A)	I _C (A)	I _B (A)	I _C (A)	V _{CE} (V)	V _{BE} (V)	I _C (A)	I _B (A)	t _{on} (μs)			t _{off} (μs)	t _{tr} (μs)	t _f (μs)	
Switching Regulator	2SC4371	—	400	5	30	(12)	5	3	1.0	5	1	1.5	1.5	5	1	*1.0	2.5	1.0	TO-220IS	F7		
	KTD1947	—	100	10	30	(500)	1	1	0.3	5	0.05	1.2	1.2	5	0.05	(0.5)	(5.0)	(1.0)	TO-220IS	F7		
	KTC3148	—	800	3	40	(10)	5	0.8	0.6	0.8	0.16	1.2	1.2	0.8	0.16	*1.0	4.0	1.0	TO-220AB	F6		
	KTC2553	—	400	5	40	(12)	5	3	1.0	5	1	1.5	1.5	5	1	*1.0	2.5	1.0	TO-220AB	F6		
	KTC2200	—	400	7	40	(10)	5	3	1.5	3	0.3	2.0	2.0	3	0.3	*1.0	2.0	1.0	TO-3P(S)	F11		
	KTC2791	—	800	5	100	(10)	5	10mA	1.0	3	0.6	1.5	1.5	3	0.6	*1.0	3.5	1.0	TO-3P(L)	F12		
	KTC2650	—	400	10	100	(10)	5	5	1.5	5	0.5	2.0	2.0	5	0.5	*1.0	2.5	1.0	TO-3P(L)	F12		
	KTC3680	—	800	7	120	(10)	5	10mA	1.0	3	0.6	1.5	1.5	3	0.6	*1.0	3.5	1.0	TO-3P(L)	F12		
	BUV48A	—	450	15	(150)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	TO-3P(L)	F12	
	BUV48C	—	700	15	(175)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	TO-3P(L)	F12	
Darlington	KTD686	—	80	4	30	(2000)	2	1	1.5	3	6mA	2	2	3	6mA	0.2	1.5	0.6	TO-220AB	F6		
	BU806	—	200	8	(60)	—	—	—	—	—	—	—	—	—	—	—	0.35	0.55	0.2	TO-220AB	F6	

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Applications	Type No		Maximum Ratings				Electrical Characteristics (Ta=25°C)										Package	Fig			
	NPN	PNP	V _{CEO} (V)	I _C (mA)	P _D (mW)	h _{FE}	(MIN)		MAX		V _{CE(sat)}		f _T		SW Time						
							V _{CE} (V)	I _C (mA)	I _C (mA)	I _B (mA)	V _{CE} (V)	f _T (MHz)	t _{on} (ns)	t _{off} (ns)	t _{tr} (ns)	t _f (ns)			t _{on} (ns)	t _{off} (ns)	t _{tr} (ns)
Switching	2N3904	2N3906	40	200	625	*100~300	1.0	10	0.2	10	1.0	300	20	10	10	35	35	200	50	TO-92(B)	F3
	—	2N5401	150	600	625	*60~240	5.0	1.0	0.2	10	1.0	100	10	10	—	—	—	—	—	TO-92(B)	F3
	2N5551	—	160	600	625	*80~250	5.0	10	0.2	50	5.0	100	10	10	—	—	—	—	—	TO-92(B)	F3
	KTN2369	—	15	500	625	*40~120	1.0	10	0.25	10	1.0	500	10	10	12	—	—	—	—	TO-92(B)	F3
	KTN2369A	—	15	500	625	*40~120	1.0	10	0.3	10	1.0	500	10	10	12	—	—	—	—	TO-92(B)	F3
	KTN2222	KTN2907	30	600	625	(50)	10	1.0	0.4	150	15	250	20	20	—	10	25	225	60	TO-92(B)	F3
	KTN2222A	KTN2907A	40	600	625	(50)	10	1.0	0.3	150	15	300	20	20	—	10	25	225	60	TO-92(B)	F3
	—	*MPSA92	100	500	625	*125	10	1.0	0.5	20	2.0	50	20	10	—	—	—	—	—	TO-92(B)	F3
	—	*MPSA93	200	500	625	*125	10	1.0	0.4	20	2.0	50	20	10	—	—	—	—	—	TO-92(B)	F3

* Pulse width 300μs, Duty Cycle 20%

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	NPN	PNP	Maximum Ratings			h _{FE}			V _{CE(sat)}			TYP				C _{ob}	F	Fig
			V _{CEO} (V)	I _C (A)	P _C (W)	V _{CE} (V)	I _C (mA)	I _C (mA)	V _{CE} (V)	I _C (mA)	I _B (mA)	f _T (MHz)	V _{CE} (V)	I _C (mA)				
27MHz Drive/Output	KTC2036A	—	80	1	1.2	100	2	150	0.7	500	20	150	10	100	12	1	FR	
	KTC2075	—	80	4	*10	25	5	0.5A	1.5	3A	0.3A	100	5	500	40	V _{CE1} = 10	16	
High B Low V _{CE(sat)}	KTC3112	—	50	0.15	0.4	600~3600	6	2	0.25	100	10	250	10	10	3.5	1	10-92E	
	KTD1582	—	50	1	1	800~3200	5	0.3A	0.3	0.5A	5	250	10	(0.5A)	18	1	10-92E	
Strobe Flash	2SC3226	—	10	2	0.9	140~600	1	0.5A	0.5	2A	50	150	1	0.5A	27	1	FO-92L	
	2SC4377	—	30	2	*1	140~600	1	0.5A	0.5	2A	50	150	1	0.5A	27	1	SOT-89	
	—	—	20	5	*10	100~320	2	0.5A	1	4A	0.1A	170	2	0.5A	62	1	SMP-1	
Mixing	*KTC2578	—	20	0.3	0.4	200~1200	2	4	0.3	30	3	30	6	4	4.8	1	10-92(C)	

h_{FE}: Te = 25°C P_C: mounted on ceramic substrate (250mm² x 0.8t)