

SILICON TRANSISTORS

Planar Epitaxial High Speed Switching (n-p-n)

Type No.	Maximum Ratings				Characteristics										Package	Out-line Drawing	Comments
	V _{CB0}	V _{CER}	V _{EBO}	P _{tot} 25°C amb.	V _{CE(sat)} (max.)			h _{FE}			f _T min.	Storage Time t _S (max.)					
					volts	volts	volts	mW	volts	I _C mA		I _B mA	min.	max.			
BSY95A	20	20	5	300	0.35	10	0.2	50	200	10	200	50	10	TO-18	T2B	For low cost high performance systems.	
ZTX310, BSV23	25	20	3	300	0.6	10	1	20	—	10	200	60	10	E-Line §	T21		
ZTX311, BSV24	20	15††	5	300	0.35	10	0.2	50	200	10	200	25	10	E-Line §	T21		
ZTX312, BSV25	30	12††	5	300	0.24	10	1	40	—	10	400	13	10	E-Line §	T21		
ZTX313, BSV26	40	15††	5	300	0.24	10	1	40	120	10	500	13	10	E-Line §	T21		
ZTX314, BSV27	40	15††	5	300	0.5	100	10	40	120	10	500	13	10	E-Line §	T21		
2N706	25	20	3	300	0.6	10	1	20	—	10	200	60	10	TO-18	T2B		
2N706A	25	20	5	300	0.6	10	1	20	60	10	200	25	10	TO-18	T2B		
2N708	40	20	5	360	0.4	10	1	30	120	10	300	25	10	TO-18	T2B		
2N709	15	6†	4	300	0.3	3	0.15	20	120	10	600	6	5	TO-18	T2A		
2N753	25	20	5	300	0.6	10	1	40	120	10	250	35	—	TO-18	T2B		
2N2206	25	20††	5	300	0.22	10	1	40	120	10	200	35	10	TO-46	T1A		High speed logic and core driving applications
2N2368	40	15†	4.5	360	0.25	10	1	20	60	10	400	10	10	TO-18	T2A		
2N2369	40	15†	4.5	360	0.25	10	1	40	120	10	500	13	10	TO-18	T2A		
2N2369A	40	15†	4.5	360	0.2	10	1	40	120	10	500	13	10	TO-18	T2A		
2N2475	15	6†	4	300	0.4	20	0.66	30	150	20	600	6	5	TO-18	T2A		
2N2476	60	20†	5	600	0.4	150	7.5	20	—	150	250	25	150‡	TO-5	T7A		
2N2477	60	20†	5	600	0.4	150	3.75	40	—	150	250	25	150‡	TO-5	T7A		
2N2938	25	13†	5	300	0.4	50	1.6	25	—	10	500	15	10	TO-18	T2A		
2N3262	100	80‡‡	4	1000	0.6	1000	100	40	—	500	150	40		TO-5	T7C		

*Also available as ZT706, etc. † V_{CEO} ‡ V_{CEO(sus)} †† V_{CER}, R_L=100Ω ‡ I_{B1}=I_{B2}=15 mA. || t_{on} at I_C=1 Amp and I_{B1}=I_{B2}=100mA
 § See note below High-Speed Core Drivers (n-p-n)

High-Speed Core Drivers (n-p-n)

Type No.	Maximum Ratings				Characteristics										Package	Out-line Drawing	Comments
	V _{CB0}	V _{CEO}	V _{EBO}	P _{tot} 25°C amb.	V _{CE(sat)} (max.)			h _{FE}			f _T min.	Storage Time t _S (max.)					
					volts	volts	volts	mW	volts	I _C mA		I _B mA	min.	max.			
BSX12	25	12	4	600	0.33	300	30	30	120	300	450	15	100	TO-39	T7C	High speed core driver applications	
BSX59	70	45	5	800	0.3	150	15	30	—	150	250	—	—	TO-5	T7A		
BSX60	70	30	5	800	0.3	150	15	30	—	150	250	—	—	TO-5	T7A		
BSX61	70	45	5	800	0.5	150	15	30	—	150	250	—	—	TO-5	T7A		
ZTX360	60	40	5	500	0.6	500	50	25	150	500	250	—	—	E-Line §	T21		
ZT600	24	20	5	800	0.5	500	50	50	150	150	250	—	—	TO-5	T7A		
2N3013	40	15	5	360	0.18	30	3	30	120	30	350	18	10	TO-18	T2A		
2N3261	40	15	6	300	0.35	100	10	40	150	10	600	10	10	TO-18	T2A		
2N3512	60	35	5	800	0.4	150	7.5	50	—	500	250	30	150‡	TO-5	T7A		
2N3724	50	30	6	800	0.2	100	10	60	150	100	300	50	500*	TO-5	T7A		
2N3725	80	50	6	800	0.26	100	10	60	150	100	300	50	500*	TO-5	T7A		

† I_{B1}=I_{B2}=15mA * I_C=500mA, I_{B1}=50mA, I_{B2}=-50mA

§ Lead Configuration: — The leads of E-Line devices can be preformed, on request, to the TO-5 configuration and when this is done suffix K is added to the type number. Similarly, suffix L indicates that the leads have been preformed to the TO-18 configuration. For flat mounting, suffix M is added to the type number.

Other Transistor types available

Planar Medium Power and Switching (p-n-p)

ZT 152

Planar Matched Pairs (n-p-n)

Planar General Purpose - Small Signal (n-p-n)

ZDT 10
ZDT 11
ZDT 20
ZDT 21

ZT 202
ZT 203
ZT 204
ZT 402
ZT 403
ZT 404

Planar Medium Power and Switching (n-p-n)

ZT 60—69

Planar Epitaxial High Speed Switching (n-p-n)

2N 1708
2N 2205