

E-LINE TRANSISTORS

TABLE 7: GENERAL PURPOSE TRANSISTORS

PART NO.	V _{CBO} V	V _{CEO} V	I _C A	V _{CE(sat)} max @ V	h _{FE}		f _T min @ MHz	I _C mA	V _{CE} V	I _C mA	PIN OUT 123	
					min @	I _B mA						
NPN												
MPSA42	300	300	0.5	0.4	20	2.0	50	30	10	50	10	CBE
FXTA42	300	300	0.5	0.4	20	2.0	50	30	10	50	10	BCE
ZTX341	100	100	0.1	0.5	2	0.1	30	2	1	80	5	CBE
ZTX300	25	25	0.2	0.35	50	5.0	50	10	6	150	10	CBE
PNP												
MPSA92	-300	-300	-0.5	-0.4	-20	-2.0	50	-30	-10	50	-10	CBE
FXTA92	-300	-300	-0.5	-0.4	-20	-2.0	50	-30	-10	50	-10	BCE
ZTX541	-100	-100	-0.1	-0.5	-2	-0.1	30	-2	-1	80	-5	CBE
ZTX500	-25	-25	-0.2	-0.35	-50	-5.0	50	-10	-6	150	-10	CBE

TABLE 8: LOW NOISE TRANSISTORS

These transistors are characterised for low noise, low level amplification and are ideally suited for audio pre-amplifiers and instrumentation, as well as universal applications.

PART NO.	V _{CBO} V	V _{CEO} V	I _C A	V _{CE(sat)} max @ V	h _{FE}		f _T min @ MHz	I _C mA	V _{CE} V	Noise figures			PIN OUT 123		
					min @	I _B mA				max @ dB	I _C μA	f Hz			
NPN															
ZTX384C	45	30	0.2	0.25	10	0.5	250	2	5	150	10	4	200	30-15K	CBE
PNP															
ZTX214C	-45	-30	-0.2	-0.25	-10	-0.5	350	-2	-5	200	-10	2	-200	30-15K	CBE

TABLE 9: AVALANCHE TRANSISTORS

Specifically designed to operate in the avalanche mode. Suitable for pulsing laser diodes, pulse generators and other applications requiring very fast edges.

PART NO.	V _{CBO} V	V _{CEO} V	I _{CM} + A	I _{SB} * A	@		h _{FE} @		f _T min MHz	P _D mW	PIN OUT 123	
					V _C V	C _{CE} nF	min	I _C mA				
NPN												
ZTX415	260	100	60	25	250	0.62	25	10	40	10	680	CBE
ZTX413	150	50	50	31	130	4.7	50	10	150	10	500	CBE

*Current In Secondary Breakdown

+Maximum pulse width 20 nsec

TABLE 10: SWITCHING TRANSISTORS

These gold doped transistors have been processed to provide short switching times and low output capacitance

PART NO.	V _{CBO} V	V _{CEO} V	I _C A	V _{CE(sat)} max @ V	h _{FE}		f _T min @ MHz	I _C mA	V _{CE} V	f _T min @ MHz	I _C mA	Switching times @			PIN OUT 123
					min @	I _B mA						t _{on} ns	t _{off} ns	I _C mA	
NPN															
MPS2222A	75	40	0.8	0.3	150	15	100	150	10	300	20	35	285	150	CBE
FXT2222A	75	40	0.8	0.3	150	15	100	150	10	300	20	35	285	150	BCE
ZTX360	60	40	1	0.6	500	50	25	500	1	200	50	40	75	500	CBE
ZTX314	40	15	0.5	0.5	100	10	20	100	1	500	10	12	18	10	CBE
MPS2369A	40	15	0.5	0.2	10	1	20	100	1	-	-	12	18	10	CBE
PNP															
MPS2907A	-60	-60	-0.6	-0.4	-150	-15	-100	-150	-10	200	-50	50	110	-150	CBE
FXT2907A	-60	-60	-0.6	-0.4	-150	-15	-100	-150	-10	200	-50	50	110	-150	BCE
ZTX510	-12	-12	-0.2	-0.5	-100	-10	-40	-30	-0.5	400	-30	60	90	-30	CBE

TABLE 11: RF TRANSISTORS

These transistors are designed for small signal amplification from RF to VHF/UHF frequencies.

Applications areas include cordless telephones and keyless entry systems

PART NO.	V _{CBO} V	V _{CEO} V	f _T min MHz	I _C mA	Max noise figure			C _{obo} max pF	h _{FE} @		I _C mA	G _{pe} min dB	P _D mW	PIN OUT 123
					N dB	I _C mA	f MHz		min	max				
NPN														
ZTX327	55	30	500	25	-	-	-	3	15	-	50	-	-	CBE
ZTX3866	55	30	400	25	-	-	-	3	15	200	50	-	-	CBE
FXT3866	55	30	400	25	-	-	-	3	15	200	50	-	-	BCE
MPSH10P	30	25	650	4	5	2	500	0.65	60	-	4	-	500	CEB
ZTX325	30	15	1300	25	5	2	500	0.85	20	125	25	-	350	CBE
ZTX320	30	15	600	4	6	1	60	1.7	20	-	3	15 [#]	300	CBE
ZTX321	30	15	600	4	6	1	60	1.7	20	-	3	15 [#]	300	CBE
ZTX322	30	15	600	4	6	1	60	1.7	20	150	3	15 [#]	300	CBE
ZTX323	30	15	600	4	6	1	60	1.7	100	300	3	15 [#]	300	CBE
MPS5179	20	12	900	5	4.5	1.5	100	1	25	250	3	15	350	CBE

#Typical Values