TABLE 14: NPN HIGH FREQUENCY

The devices shown in this table are designed for high frequency operation in such application areas as amplification, switching and oscillation.

Type	V_{CEO} V	Max. I_C mA	Max. $V_{CE(sat)}$ at V	at I_C mA	at I_B mA	Min. f_T at MHz	at I_C mA	Max. Noise figure N dB	at I_C μA	at f MHz	Max. C_{obo} at 1 MHz pF	V_{CB} V	RF P_O or RF P_G at mW or dB	f MHz
NPN														
ZTX327	30	400	1.0	100	20	800*	25	—	—	—	3.0	30	350mW	400
ZTX320	15	500	0.4	10	1.0	600	4	<6	1	60	1.7	10	15dB	200
ZTX321	15	500	0.4	3.0	0.3	600	4	<6	1	60	1.7	10	15dB	200
ZTX322	15	500	0.4	10	1.0	600	4	<6	1	60	1.7	10	15dB	200
ZTX323	15	500	0.4	10	1.0	600	4	<6	1	60	1.7	10	15dB	200
ZTX325	15	50	—	—	—	1000	2	5	2000	500	1.5	10	175mW	500

*Typical.

TABLE 15: NPN AVALANCHE TRANSISTOR

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

Type	V_{CBO} V	V_{CEO} V	h_{FE} at Min	at I_C mA	Peak† Collector Current I_{CM} A	P_{tot} at $T_{amb}=25°C$ mW	I_{SB}* at A	at V_C V	f_T at MHz	at I_C mA
ZTX415	260	100	25	10	60	680	25	250	40	10

*Current in second breakdown. †Maximum pulse width 20n sec.

R.F. TRANSISTORS AND DIODES

TABLE 1: NPN RF TRANSISTORS TO 1 WATT

The transistors shown in this table are suitable for use in a wide range of high frequency applications where high f_T, low noise and low intermodulation distortion features are required.

Typical applications include UHF/VHF amplifiers, communications equipments, domestic and automotive remote access products, and oscilloscopes.

Device Type	V_{CBO}	V_{CEO}	Min. f_T at		Max. noise figure at			C_{obo} or C_{re}	h_{FE} at			P_{tot}	G_{pe}	Package Type
	V	V	MHz	I_C mA	N dB	I_C mA	f MHz	Max. pf	Min.	Max.	I_C mA	mW	dB	
2N3866	55	30	200	25	–	–	–	3.0	15	200	50	1000	8.5	TO-39
ZTX327	55	30	500	25	–	–	–	3.0	15	–	50	1000	8.5	E-Line
ZTX3866	55	30	400	25	–	–	–	3.0	15	200	50	1000	8.5	E-Line
MPSH10	30	25	650	4	–	–	–	0.65	60	–	4	350	–	E-Line
FMMTH10	30	25	650	4	–	–	–	–	60	–	4	350	–	SOT-23
2N4427	40	20	200	25	–	–	–	4.0	–	–	–	1000	15	TO-39
2N2708	35	20	700	2	8.5	2	200	1.5	30	200	2	200	15	TO-72
BFY90	30	15	1300	25	5	1	500	1.5	20	125	25	200	–	TO-72
ZTX325	30	15	1300	25	5	2	500	0.85	20	125	25	350	–	E-Line
BFS17	30	15	1300	25	4.5	2	500	0.85	20	125	25	350	–	SOT-23
2N918	30	15	600	4	6.0	1	60	1.7	20	–	3	200	15	TO-72
FMMT918	30	15	600	4	6.0	1	60	1.7	20	–	3	350	15	SOT-23
BFQ31A	30	15	600	4	6.0	1	60	1.7	20	100	3	350	15	SOT-23
BFQ31	30	15	600	4	6.0	1	60	1.7	20	100	3	350	15	SOT-23
ZTX320	30	15	600	4	6.0	1	60	1.7	20	–	3	300	15	E-Line
ZTX321	30	15	600	4	6.0	1	60	1.7	20	–	3	300	15	E-Line
ZTX322	30	15	600	4	6.0	1	60	1.7	20	150	3	300	15	E-Line
ZTX323	30	15	600	4	6.0	1	60	1.7	100	300	3	300	15	E-Line