LOW NOISE AND GOOD HFE LINEARITY

These devices are designed to use on applications where good HFE linearity and low noise characteristics are required: Instrumentation, Hi-Fi Preamplifier.

NPN	PNP	BV_{CEO} (Volts)	Pd mW 25 °C Amb.	H_{FE} 10 μA/5 V	
				Min.	Typ.
BC239	BC309	45	625	–	–
BC239A	BC309A	45	625	–	90
BC239B	BC309B	45	625	–	150
BC239C	BC309C	45	625	–	270
BC413	BC415	30	625	100	–
BC413B	BC415B	30	625	100	150
BC413C	BC415B	30	625	100	270
BC414	BC416	45	625	100	–
BC414B	BC416B	45	625	100	150
BC414C	BC416C	45	625	100	270
BC549	BC559	30	625	100	–
BC549B	BC559B	30	625	100	150
BC549C	BC559C	30	625	100	270
BC550	BC560	45	625	100	–
BC550B	BC560B	45	625	100	150
BC550C	BC560C	45	625	100	270
MPSA18		45	625	400	500

(1) V_T: Total Input Noise Voltage (see Application Note, BC413/BC414 and BC415/BC416 Data Sheets) at R_S = 2 K, I_C = 200 μA, V_{CE} = 5 Volts.

(2) N_F: Noise Figure at R_S = 2 K, I_C = 200 μA, V_{CE} = 5 Volts, F = 30 Hz to 15 KHz.

HIGH CURRENT AMPLIFIER TRANSISTORS (TO-92)

Useful in Low Power Audio Output Stages and Medium Current Switches.

NPN	PNP	BV_{CEO} (Volts)	Pd mW 25 °C Amb.	I_C (mA) Cont.	H_{FE} Min.
BC337	BC327	45	625	800	100
BC337-16	BC327-16	45	625	800	100
BC337-25	BC327-25	45	625	800	160
BC337-40		45	625	800	250
BC338	BC328	25	625	800	100
BC338-16	BC328-16	25	625	800	100
BC338-25	BC328-25	25	625	800	160
BC338-40		25	625	800	250
BC445	BC446	60	625	200	70
BC447	BC448	80	625	200	70
BC449	BC450	100	625	200	70
BC485	BC486	45	625	1000	60
BC485A	BC486A	45	625	1000	100
BC487	BC488	60	625	1000	60
BC487A	BC488A	60	625	1000	160
BC489	BC490	80	625	1000	60
BC489A	BC490A	80	625	1000	100
MPSA05	MPSA55	60	625	500	50
MPSA06	MPSA56	80	625	500	50

[1] PNP/Typ.

HIGH VOLTAGE AMPLIFIER TRANSISTORS (TO-92)

NPN	PNP	BV_{CEO} (Volts)	Pd mW 25 °C Amb.	I_C max. (mA) Cont.	H_{FE} @ Min.
MPSL01	2N5400	120	625	600	50
2N5550		140	625	600	60
2N5551		160	625	600	80
	2N5401	150	625	600	60
BF391	BF491	200	625	500	40
BF392	BF492	250	625	500	40
BF393	BF493	300	625	500	40

H_{FE} 2 mA/5 V Min.	Max.	(1) V_T 120 Hz mV Typ.	Max.	(2) N_F (dB) Typ.	Max.	F_T Typ. (MHz)
120	800	9.5	–	2	4	240
120	220	9.5	–	2	4	240
180	460	9.5	–	2	4	240
380	800	9.5	–	2	4	240
180	800	8	12	0.6	2.5	250
180	460	8	12	0.6	2.5	250
380	800	8	12	0.6	2.5	250
180	800	8	12	0.6	2.5	250
180	460	8	12	0.6	2.5	250
380	800	8	12	0.6	2.5	250
180	800	8	12	0.6	2.5	250
180	460	8	12	0.6	2.5	250
380	800	8	12	0.6	2.5	250
180	800	8	12	0.6	2.5	250
180	460	8	12	0.6	2.5	250
380	800	8	12	0.6	2.5	250
500	–	7	–	–	1.5	160

H_{FE} @ Max.	I_C (mA)	V_{CE} (Volts)	F_T Typical (MHz)	Pinning
600	100	1	210	CBE
250	100	1	210	CBE
400	100	1	210	CBE
600	100	1	210	CBE
600	100	1	210	CBE
250	100	1	210	CBE
400	100	1	210	CBE
600	100	1	210	CBE
–	10	5	250/200[1]	CBE
–	10	5	250/200[1]	CBE
–	10	5	250/200[1]	CBE
400	100	2	200/150[1]	CBE
250	100	2	200/150[1]	CBE
400	100	2	200/150[1]	CBE
250	100	2	200/150[1]	CBE
400	100	2	200/150[1]	CBE
250	100	2	200/150[1]	CBE
–	100	1	150/175[1]	EBC
–	100	1	150/175[1]	EBC

I_C (mA)	V_{CE} (Volts)	C_{RE} (pF) Typ.	F_T Typ. (MHz)	@ I_C (mA)	V_{CE} (Volts)	Pinning
10	5	3	160	10	10	EBC
10	5	3	160	10	10	EBC
10	5	3	200	10	10	EBC
10	5	4	150	10	10	EBC
10	10	1.6	70	10	60	EBC
10	10	1.6	70	10	60	EBC
10	10	1.6	70	10	60	EBC