

TABLE 3 – SILICON PLANAR MEDIUM and HIGH SPEED SWITCHING TRANSISTORS

Devices in this table are suitable for general purpose, high speed switching and high frequency amplifier applications.

Ratings and characteristics at 25 °C ambient temperature.

Type	Maximum Ratings			h_{FE}		$V_{CE(sat)}$		f_T at $I_C=10mA$ MHz(min)	Switching Times	
	V_{CE0} Volts	I_C mA	P_{tot} mW	min/max	at I_C/V_{CE} mA/Volts	max at I_C/I_B (volts)	mA		t_{on}/t_{off} ns(max)	at $I_C/I_B/I_{B2}$ mA
n-p-n										
BCW60*	32	200	150	120/630	2/5	0.35	10/0.25	125	150/800	10/1
BCW65†	32	1000	350	100/630	100/1	0.3	100/10	100	100/400	150/15
BCW66†	45	1000	350	100/630	100/1	0.3	100/10	100	100/400	150/15
BCX70*	45	200	150	120/630	2/5	0.35	10/0.25	125	150/800	10/1
BSS66/66R	40	200	200	50/150	10/1	0.20	10/1	250	70/225	10/1
BSS67/67R	40	200	200	100/300	10/1	0.20	10/1	300	70/250	10/1
BSV62/62R	12	200	200	40/120	10/1	0.25	10/1	400	12/18	10/13
p-n-p										
BCW61*	32	200	150	120/630	2/5	0.25	10/0.25	100	150/800	10/1
BCW67†	32	1000	350	100/630	100/1	0.3	100/10	100	100/400	150/15
BCW68†	45	1000	350	100/630	100/1	0.3	100/10	100	100/400	150/15
BCX71*	45	200	150	120/630	2/5	0.25	10/0.25	100	150/800	10/1
BSS65/65R	12	200	200	40/150	30/0.5	0.25	30/3	400	60/90	30/1.5
BSS69/69R	40	200	200	50/150	10/1	0.25	10/1	200	70/260	10/1
BSS70/70R	40	200	200	100/300	10/1	0.25	10/1	250	70/300	10/1

*Available in selected gain categories – see table 1.

†Available in selected gain categories – see table 2.

TABLE 4 – SILICON PLANAR VHF and UHF TRANSISTORS (n-p-n)

Devices in this table are suitable for high frequency operation in amplifier, switching and oscillator circuits.

Ratings and characteristics at 25 °C ambient temperature.

Type	Maximum Ratings				h_{FE}		f_T		$-C_{in}$ at 1MHz		C_{TC} at 1MHz	
	V_{CB0} Volts	V_{CE0} Volts	I_C mA	P_{tot} mW	min/max	at I_C/V_{CE} mA/Volts	MHz at I_C (typ) (mA)	(mA)	pF at V_{CE} Volts	pF at V_{CB} (max) Volts	Volts	
BFQ31/31A	30	15	100	200	20/100	3/1	600*	4	2.00†	0.5	1.7	10
BFS17/17R	25	15	50	200	20/150	2/1	1000	2	0.65	5	1.5	10
BFS20/20R	30	20	25	200	40/—	7/10	450	5	0.35	10	0.8‡	10

*Maximum †Minimum ‡Typical

N.B. Values quoted under C_{in} and C_{TC} for BFQ31/31A refer to input and output capacitance respectively.