

# ELECTRICAL CHARACTERISTICS

## N.P.N. SMALL SIGNAL TRANSISTORS

Dice Type	$V_{CBO}$	$V_{CEO}$	$I_{CBO}$		$h_{FE}$			$V_{CE}$	$V_{CE(sat)}$			$f_T$	$C_{obo}$	Geometry
	Min.	Min.	Max. at $V_{CB}$	Max. at $V_{CB}$	Min.	Max.	@ $I_C$		Max.	$I_C$	$I_B$			
	V	V	nA	V	Min.	Max.	mA	V	Max.	mA	mA	MHz	pF	
BC546A	80	65	15	30	110	220	2	5	0.25	10	0.5	300§	4.5	G1
BC546B	80	65	15	30	200	450	2	5	0.25	10	0.5	300§	4.5	G1
BCY65EA	60	60	10*	32*	120	220	2	5	0.35	10	0.25	125	6	G1
BC182	60	50	15	50	100	480	2	5	0.25	10	0.5	150	5	G1
2N3903	60	40	50†	30†	50	150	10	1	0.2	10	1.0	250	4	G3
2N3904	60	40	50†	30†	100	300	10	1	0.2	10	1.0	300	4	G3
BC107A	50	45	15*	50*	120	220	2	5	0.2	10	0.5	150	6	G1
BC107B	50	45	15*	50*	180	460	2	5	0.2	10	0.5	150	6	G1
BC237A	50	45	15*	50*	120	220	2	5	0.2	10	0.5	150	4.5	G1
BC237B	50	45	15*	50*	180	460	2	5	0.2	10	0.5	150	4.5	G1
BC547A	50	45	15	30	110	220	2	5	0.25	10	0.5	300§	4.5	G1
BC547B	50	45	15	30	200	450	2	5	0.25	10	0.5	300§	4.5	G1
BC550B	50	45	15	30	200	450	2	5	0.25	10	0.5	300§	4.5	G1
BC550C	50	45	15	30	420	800	2	5	0.25	10	0.5	300§	4.5	G1
BCY59A	45	45	10*	45*	120	220	2	5	0.35	10	0.25	125	6	G1
BCY59B	45	45	10*	45*	180	310	2	5	0.35	10	0.25	125	6	G1
BCY59C	45	45	10*	45*	250	460	2	5	0.35	10	0.25	125	6	G1
BCY59D	45	45	10*	45*	380	630	2	5	0.35	10	0.25	125	6	G1
2N930	45	45	10*	45*	100	300	0.1	5	1.0	10	0.5	300	8	G1
BC183	45	30	15	30	100	850	2	5	0.25	10	0.5	150	5	G1
BC184	45	30	15	30	250	—	2	5	0.25	10	0.5	150	5	G1
BCY58A	32	32	10*	32*	120	220	2	5	0.35	10	0.25	125	6	G1
BCY58B	32	32	10*	32*	180	310	2	5	0.35	10	0.25	125	6	G1
BCY58C	32	32	10*	32*	250	460	2	5	0.35	10	0.25	125	6	G1
BCY58D	32	32	10*	32*	380	630	2	5	0.35	10	0.25	125	6	G1
BC548A	30	30	15	30	110	220	2	5	0.25	10	0.5	300§	4.5	G1
BC548B	30	30	15	30	200	450	2	5	0.25	10	0.5	300§	4.5	G1
BC548C	30	30	15	30	420	800	2	5	0.25	10	0.5	300§	4.5	G1
BC549B	30	30	15	30	200	450	2	5	0.25	10	0.5	300§	4.5	G1
BC549C	30	30	15	30	420	880	2	5	0.25	10	0.5	300§	4.5	G1
BC108A	30	20	15*	30*	120	220	2	5	0.2	10	0.5	150	6	G1
BC108B	30	20	15*	30*	180	460	2	5	0.2	10	0.5	150	6	G1
BC108C	30	20	15*	30*	380	800	2	5	0.2	10	0.5	150	6	G1
BC109B	30	20	15*	30*	180	460	2	5	0.2	10	0.5	150	6	G1
BC109C	30	20	15*	30*	380	800	2	5	0.2	10	0.5	150	6	G1
BC238A	30	20	15*	30*	120	220	2	5	0.2	10	0.5	150	4.5	G1
BC238B	30	20	15*	30*	180	460	2	5	0.2	10	0.5	150	4.5	G1
BC238C	30	20	15*	30*	380	800	2	5	0.2	10	0.5	150	4.5	G1
BC239B	30	20	15*	30*	180	460	2	5	0.2	10	0.5	150	4.5	G1
BC239C	30	20	15*	30*	380	800	2	5	0.2	10	0.5	150	4.5	G1

$V_{CE(sat)}$ ,  $f_T$  and  $C_{obo}$  are parameters which are assembly dependent and figures quoted are those typically achieved on Ferranti assembly lines.

\* $I_{CES}$  at  $V_{CES}$  † $I_{CEX}$  at  $V_{CE}$  §Typical