

Type	Application (suitable complementary transistors)	epitaxial = E planar = PL	Max. ratings						
			V _{CB0} [V _{CE}] V	V _{CEO} V	V _{EB0} V	I _C mA	T _J C	P _{tot} mW	R _{thJA} K/W
NPN = N PNP = P									
BC 167 ¹⁾ N	AF input and driver stages	(BC 257) E, PL	[50]	45	6	100	150	300	≅420
BC 168 ¹⁾ N	AF input and driver stages	(BC 258) E, PL	[50]	20	5	100	150	300	≅420
BC 169 ¹⁾ N	AF input stages (low-noise)	(BC 259) E, PL	[30]	20	5	50	150	300	≅420
BC 182 ¹⁾ N	AF input stages	(BC 212) E, PL	60	50	6	200	150	300	≅400
BC 212 ¹⁾ P	AF input and driver stages	(BC 182) E, PL	-60	-50	-5	200	150	300	≅400
BC 237 ¹⁾ N	AF input and driver stages	(BC 307) E, PL	[50]	45	6	100	150	300	≅420
BC 238 ¹⁾ N	AF input and driver stages	(BC 308) E, PL	[30]	20	5	100	150	300	≅420
BC 239 ¹⁾ N	AF input stages (low-noise)	(BC 309) E, PL	[30]	20	5	50	150	300	≅420
BC 257 ¹⁾ P	AF input and driver stages	(BC 167) E, PL	[-50]	-45	-5	100	150	300	≅420
BC 258 ¹⁾ P	AF input and driver stages	(BC 168) E, PL	[-30]	-25	-5	100	150	300	≅420
BC 259 ¹⁾ P	AF input stages (low-noise)	(BC 169) E, PL	[-25]	-20	-5	50	150	300	≅420
BC 307 ¹⁾ P	AF input and driver stages	(BC 237) E, PL	[-50]	-45	-5	100	150	300	≅420
BC 308 ¹⁾ P	AF input and driver stages	(BC 238) E, PL	[-30]	-25	-5	100	150	300	≅420
BC 309 ¹⁾ P	AF input and driver stages	(BC 239) E, PL	[-25]	-20	-5	50	150	300	≅420
BC 327 ¹⁾ P	AF driver and output stages	(BC 337) E, PL	[-50]	-45	-5	800	150	625	≅200
BC 328 ¹⁾ P	AF driver and output stages	(BC 338) E, PL	[-30]	-25	-5	800	150	625	≅200
BC 337 ¹⁾ N	AF driver and output stages	(BC 327) E, PL	[50]	45	5	800	150	625	≅200
BC 338 ¹⁾ N	AF driver and output stages	(BC 328) E, PL	[30]	25	5	800	150	625	≅200
BC 368 ¹⁾ N	AF push-pull output stages	(BC 369) E, PL	[25]	20	5	1000	150	800	≅156
BC 369 ¹⁾ P	AF push-pull output stages	(BC 368) E, PL	[-25]	-20	-5	1000	150	800	≅156
BC 413 ¹⁾ N	AF input stages (low-noise)	(BC 415) E, PL	45	30	5	100	150	300	≅400
BC 414 ¹⁾ N	AF input stages (low-noise)	(BC 416) E, PL	50	45	5	100	150	300	≅400
BC 415 ¹⁾ P	AF input stages (low-noise)	(BC 413) E, PL	-45	-35	-5	100	150	300	≅400
BC 416 ¹⁾ P	AF input stages (low-noise)	(BC 414) E, PL	-50	-45	-5	100	150	300	≅400
BC 516 ²⁾ P	Relay drivers for AF application	(BC 517) E, PL	-40	-30	-10	-400	150	625	≅200
BC 517 ²⁾ N	Relay drivers for AF application	(BC 516) E, PL	40	30	10	400	150	625	≅200
BC 546 ¹⁾ N	AF input and driver stages	(BC 556) E, PL	80	65	6	100	150	500	≅250
BC 547 ¹⁾ N	AF input and driver stages	(BC 557) E, PL	50	45	6	100	150	500	≅250
BC 548 ¹⁾ N	AF input and driver stages	(BC 558) E, PL	30	30	6	100	150	500	≅250
BC 549 ¹⁾ N	AF input stages (low-noise)	(BC 559) E, PL	30	30	5	100	150	500	≅250
BC 550 ¹⁾ N	AF input stages (low-noise)	(BC 560) E, PL	50	45	5	100	150	500	≅250
BC 556 ¹⁾ P	AF input and driver stages	(BC 546) E, PL	-80	-65	-5	100	150	500	≅250
BC 557 ¹⁾ P	AF input and driver stages	(BC 547) E, PL	-50	-45	-5	100	150	500	≅250
BC 558 ¹⁾ P	AF input and driver stages	(BC 548) E, PL	-30	-30	-5	100	150	500	≅250
BC 559 ¹⁾ P	AF input stages (low-noise)	(BC 549) E, PL	-30	-30	-5	100	150	500	≅250
BC 560 ¹⁾ P	AF input stages (low-noise)	(BC 550) E, PL	-50	-45	-5	100	150	500	≅250
BC 617 ²⁾ N	Relay driver stages and general AF applications	E, PL	50	40	12	1000	150	625	≅200
BC 618 ²⁾ N		E, PL	80	55	12	1000	150	625	≅200
BC 635 N	AF driver stages	(BC 636) E, PL	[45]	45	5	1000	150	800	≅156
BC 637 N	AF driver stages	(BC 638) E, PL	[60]	60	5	1000	150	800	≅156
BC 639 N	AF driver stages	(BC 640) E, PL	[100]	80	5	1000	150	800	≅156
BC 636 P	AF driver stages	(BC 635) E, PL	[-45]	-45	-5	1000	150	800	<156
BC 638 P	AF driver stages	(BC 637) E, PL	[-60]	-60	-5	1000	150	800	<156
BC 640 P	AF driver stages	(BC 639) E, PL	[-100]	-80	-5	1000	150	800	<156
BC 875 ²⁾ N	Relay driver stages and general AF applications	(BC 876) E, PL	60	45	5	1000	150	800	<156
BC 877 ²⁾ N		(BC 878) E, PL	80	60	5	1000	150	800	<156
BC 879 ²⁾ N		(BC 880) E, PL	100	80	5	1000	150	800	<156
BC 876 ²⁾ P	Relay driver stages and general AF applications	(BC 875) E, PL	-60	-45	-5	1000	150	800	<156
BC 878 ²⁾ P		(BC 877) E, PL	-80	-60	-5	1000	150	800	<156
BC 880 ²⁾ P		(BC 879) E, PL	-100	-80	-5	1000	150	800	<156

1) Available in various current gain groups

2) Darlington transistors

Characteristics ($T_{amb} = 25^{\circ}\text{C}$)

f_T	h_{FE}	at I_C	V_{CE}	I_{CBO} at I_{CES}^*	V_{CBO} V_{CES}^*	Remarks	Figure
MHz		mA	V	μA [nA]	V		
250	120 to 460	2	5	[0.2 (>15)]*	50*	$NF = 2(<10)\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	17
250	120 to 800	2	5	[0.2 (>15)]*	30*	$NF = 2(<10)\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	17
300	180 to 800	2	5	[0.2 (<15)]*	30*	$NF = <4\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	17
>150	120 to 460	2	5	[15]	50	$NF = 2(<10)\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
200	70 to 460	2	-5	<15	-30	$NF = 2(<10)\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
250	120 to 460	2	5	[0.2 (<15)]*	30*	$NF = 2(<10)\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
250	120 to 800	2	5	[0.2 (<15)]*	30*	$NF = 2(<10)\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
300	180 to 800	2	5	[0.2 (<15)]*	30*	$NF = 4\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
130	120 to 460	2	-5	2(<100)*	-20*	$f = <10\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	17
130	120 to 800	2	-5	2(<100)*	-20*	$f = <10\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	17
130	180 to 800	2	-5	2(<100)*	-20*	$f = <10\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	17
130	120 to 460	2	-5	2(<100)*	-20*	$NF < 10\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$	126
130	120 to 800	2	-5	2(<100)*	-20*	$NF < 10\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$	126
130	180 to 800	2	-5	2(<100)*	-20*	$NF = 2(<4)\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$	126
100	100 to 600	100	-1	2(<100)*	-45*	$V_{CEsat} < 0.7\text{V}$ at $I_C = 500\text{mA}$; $h_{FE} = 10$	126
100	100 to 600	100	-1	2(<100)*	-25*	$V_{CEsat} < 0.7\text{V}$ at $I_C = 500\text{mA}$; $h_{FE} = 10$	126
100	100 to 600	100	1	2(<100)*	45*	$V_{CEsat} = 0.7\text{V}$ at $I_C = 500\text{mA}$; $h_{FE} = 10$	126
100	100 to 600	100	1	2(<100)*	25*	$V_{CEsat} = 0.7\text{V}$ at $I_C = 500\text{mA}$; $h_{FE} = 10$	126
65	85 to 375	500	1	<10	25*	$V_{CEsat} = 0.5\text{V}$ at $I_C = 1\text{A}$; $I_B = 100\text{mA}$	130
65	85 to 375	500	-1	<10	-25	$V_{CEsat} = 0.5\text{V}$ at $I_C = 1\text{A}$; $I_B = 100\text{mA}$	130
250	180 to 800	2	5	<15	30	$NF \leq 3\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 4\text{kHz}$	126
250	180 to 800	2	5	<15	30	$NF \leq 3\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 4\text{kHz}$	126
200	120 to 800	2	-5	<15	-30	$V_{CEsat} = 0.25(<0.6)\text{V}$ at $I_C = 100\text{mA}$	126
200	120 to 800	2	-5	<15	-30	$V_{CEsat} = 0.25(<0.6)\text{V}$ at $I_C = 100\text{mA}$	126
220	>30000	20	-2	[<100]	-30	$V_{CEsat} < 1\text{V}$ at $I_C = 100\text{mA}$; $I_B = 0.1\text{mA}$	126
220	>30000	20	2	[<100]	30	$V_{CEsat} < 1\text{V}$ at $I_C = 100\text{mA}$; $-I_B = 0.1\text{mA}$	126
300	75 to 450	2	5	[<15]	30	$NF = 2(<10)\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
300	75 to 450	2	5	[<15]	30	$NF = 2(<10)\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
300	75 to 800	2	5	[<15]	30	$NF = 2(<10)\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
300	200 to 800	2	5	[<15]	30	$NF = 1.2(<4)\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
300	200 to 800	2	5	[<15]	30	$NF = 1.2(<4)\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
150	75 to 450	2	-5	≤ 15	-30	$NF = 2(<10)\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
150	75 to 450	2	-5	≤ 15	-30	$NF = 2(<10)\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
150	75 to 800	2	-5	≤ 15	-30	$NF = 2(<10)\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
300	110 to 800	2	-5	≤ 15	-30	$NF = 1(<4)\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
300	110 to 800	2	-5	≤ 15	-30	$NF = 1(<4)\text{dB}$; $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
>150	>10000	10	5	[<50]	40	$V_{CEsat} < 1.1\text{V}$ at $I_C = 200\text{mA}$; $I_B = 0.2\text{mA}$	126
>150	>4000	10	5	[<50]	60	$V_{CEsat} < 1.1\text{V}$ at $I_C = 200\text{mA}$; $I_B = 0.2\text{mA}$	126
130	40 to 250	150	2	<100	30	$V_{CEsat} = 0.5\text{V}$ at $I_C = 500\text{mA}$; $I_B = 50\text{mA}$	130
130	40 to 160	150	2	<100	30	$V_{CEsat} = 0.5\text{V}$ at $I_C = 500\text{mA}$; $I_B = 50\text{mA}$	130
130	40 to 160	150	2	<100	30	$V_{CEsat} = 0.5\text{V}$ at $I_C = 500\text{mA}$; $I_B = 50\text{mA}$	130
130	40 to 250	150	-2	<100	-30	$V_{CEsat} < 0.5\text{V}$ at $I_C = 500\text{mA}$; $I_B = 50\text{mA}$	130
130	40 to 160	150	-2	<100	-30	$V_{CEsat} < 0.5\text{V}$ at $I_C = 500\text{mA}$; $I_B = 50\text{mA}$	130
130	40 to 160	150	-2	<100	-30	$V_{CEsat} < 0.5\text{V}$ at $I_C = 500\text{mA}$; $I_B = 50\text{mA}$	130
200	>2000	500	10	[<100]	V_{CBmax}	$V_{CEsat} < 1.3\text{V}$ at $I_C = 0.5\text{A}$; $I_B = 0.5\text{mA}$	130
200	>2000	500	10	[<100]	V_{CBmax}	$V_{CEsat} < 1.3\text{V}$ at $I_C = 0.5\text{A}$; $I_B = 0.5\text{mA}$	130
200	>2000	500	10	[<100]	V_{CBmax}	$V_{CEsat} < 1.3\text{V}$ at $I_C = 0.5\text{A}$; $I_B = 0.5\text{mA}$	130
200	>2000	500	-10	[<100]	V_{CBmax}	$V_{CEsat} < 1.3\text{V}$ at $I_C = 0.5\text{A}$; $I_B = 0.5\text{mA}$	130
200	>2000	500	-10	[<100]	V_{CBmax}	$V_{CEsat} < 1.3\text{V}$ at $I_C = 0.5\text{A}$; $I_B = 0.5\text{mA}$	130
200	>2000	500	-10	[<100]	V_{CBmax}	$V_{CEsat} < 1.3\text{V}$ at $I_C = 0.5\text{A}$; $I_B = 0.5\text{mA}$	130

Type	Application	epitaxial = E planar = PL	Max. ratings						
			V _{CB0}	V _{CEO}	V _{EB0}	I _C	T _J	P _{tot}	R _{thJA} [R _{thJC}] K/W
NPN = N PNP = P	(suitable complementary transistors)			V	V	mA	C	mW	
BCX 58 ¹⁾ N	AF input and driver stages and switches	(BCX 78) E, PL	—	32	7	100	150	450	≅280
BCX 59 ¹⁾ N	AF input and driver stages and switches	(BCX 79) E, PL	—	45	7	100	150	450	≅280
BCX 73 ¹⁾ N	AF stages and switching applications	(BCX 75) E, PL	—	32	5	800	150	625	≅200
BCX 74 ¹⁾ N	AF stages and switching applications	(BCX 76) E, PL	—	45	5	800	150	625	≅200
BCX 75 ¹⁾ P	AF stages and switching applications	(BCX 73) E, PL	—	-32	-5	800	150	625	≅200
BCX 76 ¹⁾ P	AF stages and switching applications	(BCX 74) E, PL	—	-45	-5	800	150	625	≅200
BCX 78 ¹⁾ P	AF input and driver stages and switches	(BCX 58) E, PL	—	-32	-5	100	150	450	≅280
BCX 79 ¹⁾ P	AF input and driver stages and switches	(BCX 59) E, PL	—	-45	-5	100	150	450	≅280
BFP 22 N	High voltage switch	E, PL	200	200	6	500	150	625	≅200
BFP 23 P	High voltage switch	E, PL	-200	-200	-5	500	150	625	≅200
BFP 25 N	High voltage switch	E, PL	300	300	6	500	150	625	<200
BFP 26 P	High voltage switch	E, PL	-300	-300	-5	500	150	625	<200

1) Available in various current gain groups
2) Darlington transistors

Dimensions in mm

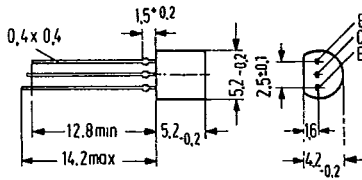


Fig. 17 Weight approx. 0.25 g

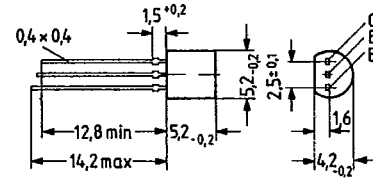


Fig. 61 Weight approx. 0.25 g

Characteristics ($T_{amb} = 25^{\circ}\text{C}$)

f_T MHz	h_{FE}	at I_C^1		at V_{CES}		Remarks	Figure
		mA	V	nA	V		
250 (>125)	120 to 630 ¹⁾	2	5	<10	32	$NF = 2(<6)\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
250 (>125)	120 to 630 ¹⁾	2	5	<10	45	$NF = 2(<6)\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
>100	100 to 630 ¹⁾	100	1	<20	32	$NF = 2(<10)\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
>100	100 to 630 ¹⁾	100	1	<20	45	$NF = 2(<10)\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $f = 1\text{kHz}$	126
>100	100 to 630 ¹⁾	100	-1	<20	-32	$NF = 2(<10)\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $R_g = 1\text{k}\Omega$	126
>100	100 to 630 ¹⁾	100	-1	<20	-45	$NF = 2(<10)\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $R_g = 1\text{k}\Omega$	126
200	120 to 630 ¹⁾	2	-5	<10	-32	$NF = 2(<6)\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $R_g = 2\text{k}\Omega$	126
200	120 to 630 ¹⁾	2	-5	<10	-45	$NF = 2(<6)\text{dB}$ at $I_C = 0.2\text{mA}$; $V_{CE} = 5\text{V}$; $R_g = 2\text{k}\Omega$	126
>50	>50	30	10	<100	160	$V_{CEsat} = 0.4\text{V}$ at $I_C = 20\text{mA}$; $I_B = 2\text{mA}$	61
>50	>30	30	-10	<100	-160	$V_{CEsat} = 0.4\text{V}$ at $I_C = 20\text{mA}$; $I_B = 2\text{mA}$	61
>50	>40	30	10	<100	200	$V_{CEsat} < 0.5\text{V}$ at $I_C = 20\text{mA}$; $I_B = 2\text{mA}$	61
>50	>25	30	-10	<100	-200	$V_{CEsat} < 0.5\text{V}$ at $I_C = 20\text{mA}$; $I_B = 2\text{mA}$	61

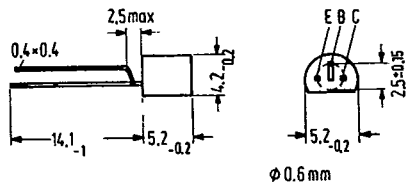


Fig. 126 Weight approx. 0.25 g

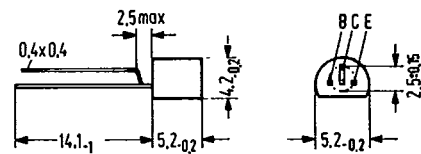


Fig. 130 Weight approx. 0.25 g