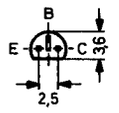
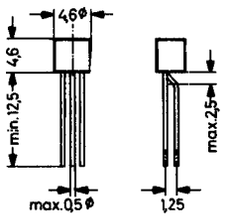
BC327, BC328

PNP Silicon Epitaxial Planar Transistors
for switching and amplifier applications. Especially suitable for AF-driver stages and low power output stages.

These types are also available subdivided into three groups –16, –25 and –40, according to their DC current gain. As complementary types the NPN transistors BC337 and BC338 are recommended.





Plastic Package ≈ JEDEC TO-92
TO-18 compatible
The case is impervious to light

Weight approximately 0.18 g
Dimensions in mm

Absolute Maximum Ratings

		Symbol	Value	Unit
Collector Emitter Voltage	**BC327** **BC328**	$-V_{CES}$ $-V_{CES}$	50 30	V V
Collector Emitter Voltage	**BC327** **BC328**	$-V_{CEO}$ $-V_{CEO}$	45 25	V V
Emitter Base Voltage		$-V_{EBO}$	5	V
Collector Current		$-I_C$	800	mA
Peak Collector Current		$-I_{CM}$	1	A
Base Current		$-I_B$	100	mA
Power Dissipation at T_{amb} = 25 °C		P_{tot}	625[1)]	mW
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_S	–55 . . . +150	°C

[1)] Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case

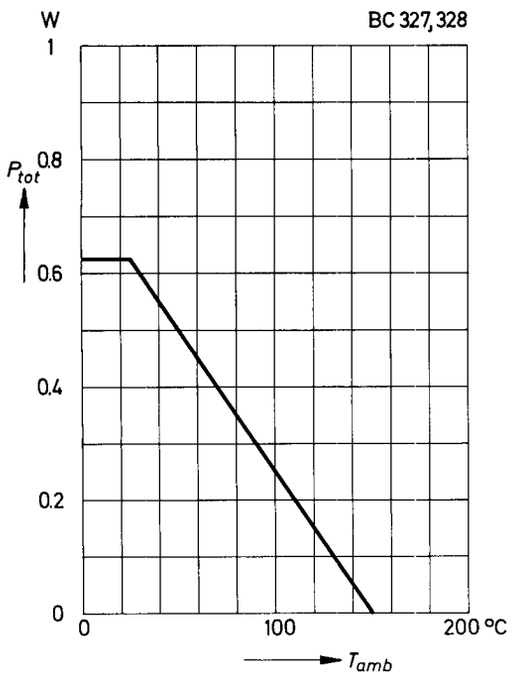
Characteristics at T_{amb} = 25 °C

		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain						
at $-V_{CE}$ = 1 V, $-I_C$ = 100 mA	**BC327, BC328**	h_{FE}	100	–	630	–
	Current Gain Group 16	h_{FE}	100	160	260	–
	25	h_{FE}	150	250	420	–
	40	h_{FE}	240	400	630	–
at $-V_{CE}$ = 1 V, $-I_C$ = 300 mA	**BC327, BC328**	h_{FE}	60	–	–	–
	Current Gain Group 16	h_{FE}	60	130	–	–
	25	h_{FE}	100	200	–	–
	40	h_{FE}	170	320	–	–
Thermal Resistance to Ambient		R_{thA}	–	–	200[1]	K/W
Collector Cutoff Current						
at $-V_{CE}$ = 25 V	**BC328**	$-I_{CES}$	–	2	100	nA
at $-V_{CE}$ = 45 V	**BC327**	$-I_{CES}$	–	2	100	nA
at $-V_{CE}$ = 25 V, T_{amb} =125 °C	**BC328**	$-I_{CES}$	–	–	10	μA
at $-V_{CE}$ = 45 V, T_{amb} =125 °C	**BC327**	$-I_{CES}$	–	–	10	μA
Collector Emitter Breakdown Voltage						
at $-I_C$ = 10 mA	**BC327**	$-V_{(BR)CEO}$	45	–	–	V
	BC328	$-V_{(BR)CEO}$	25	–	–	V
Collector Emitter Breakdown Voltage						
at $-I_C$ = 0.1 mA	**BC327**	$-V_{(BR)CES}$	50	–	–	V
	BC328	$-V_{(BR)CES}$	30	–	–	V
Emitter Base Breakdown Voltage at $-I_E$ = 0.1 mA		$-V_{(BR)EBO}$	5	–	–	V
Collector Saturation Voltage at $-I_C$ = 500mA, $-I_B$ = 50 mA		$-V_{CEsat}$	–	–	0.7	V
Base Emitter Voltage at $-V_{CE}$ = 1V, $-I_C$ = 300 mA		$-V_{BE}$	–	–	1.2	V
Gain Bandwidth Product at $-V_{CE}$ = 5 V, $-I_C$ = 10 mA, f = 50 MHz		f_T	–	100	–	MHz
Collector Base Capacitance at $-V_{CB}$ = 10 V, f = 1 MHz		C_{CBO}	–	12	–	pF

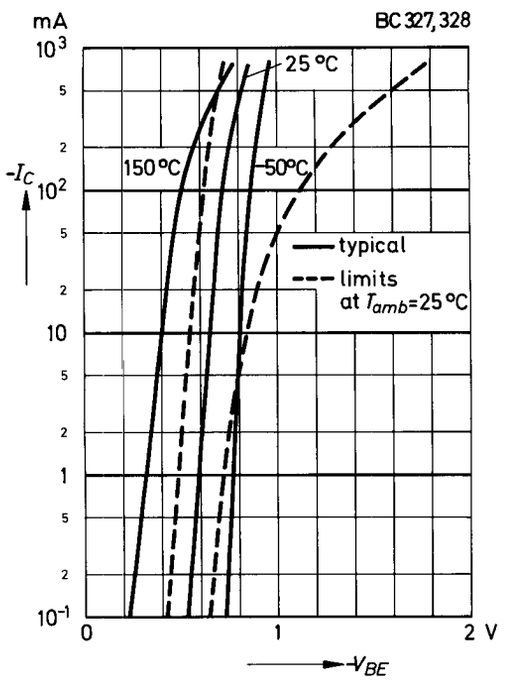
[1] Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case

Admissible power dissipation versus ambient temperature

Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case

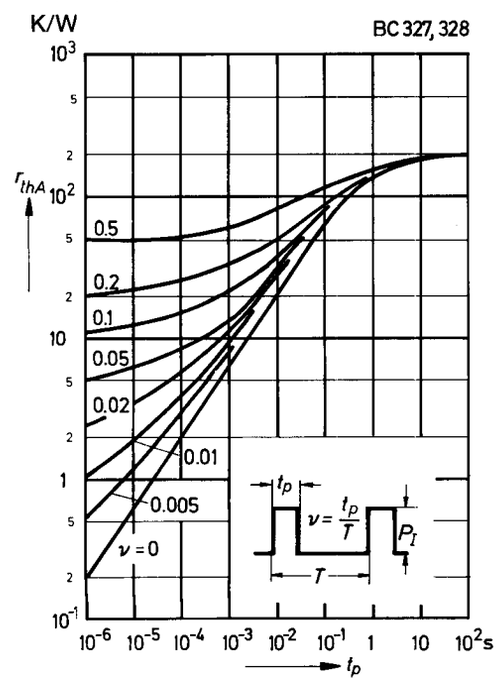


Collector current versus base emitter voltage

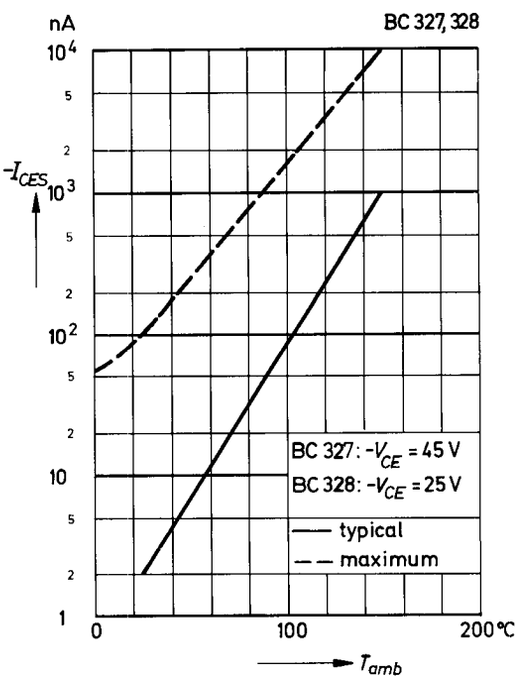


Pulse thermal resistance versus pulse duration

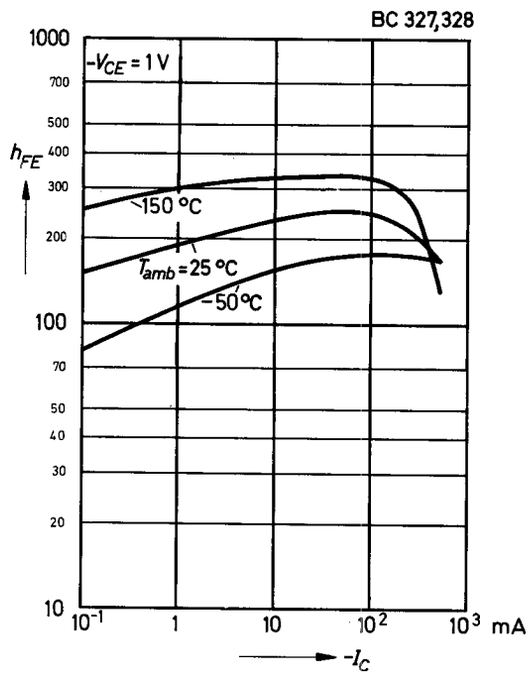
Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case



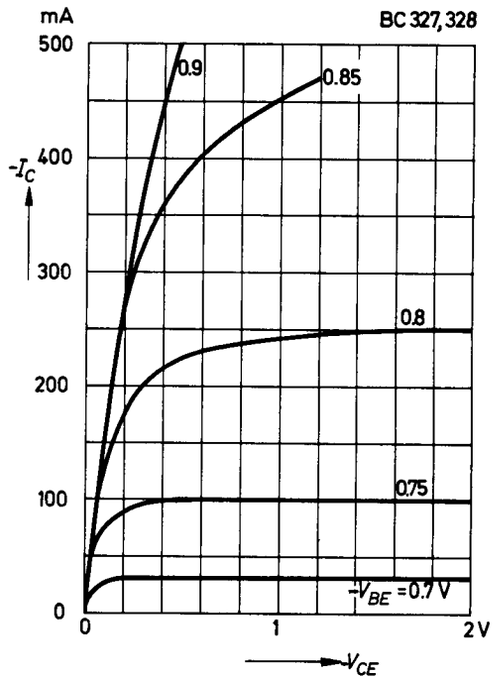
Collector cutoff current versus ambient temperature



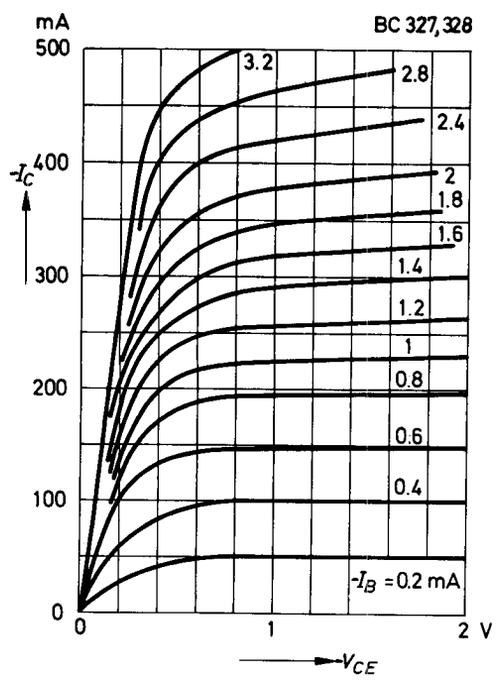
DC current gain versus collector current



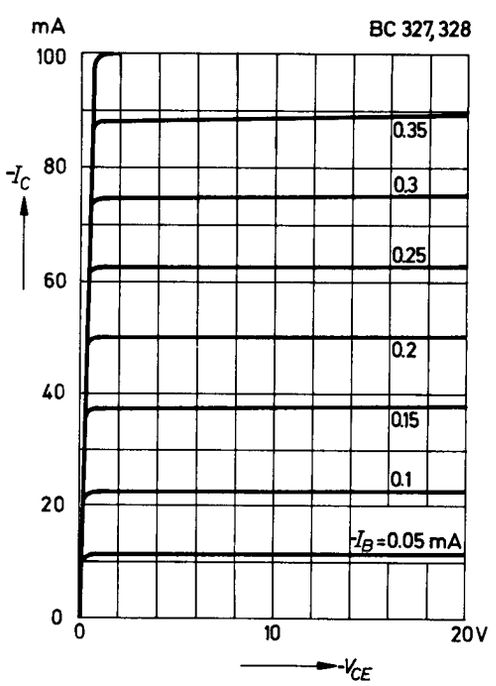
Common emitter collector characteristics



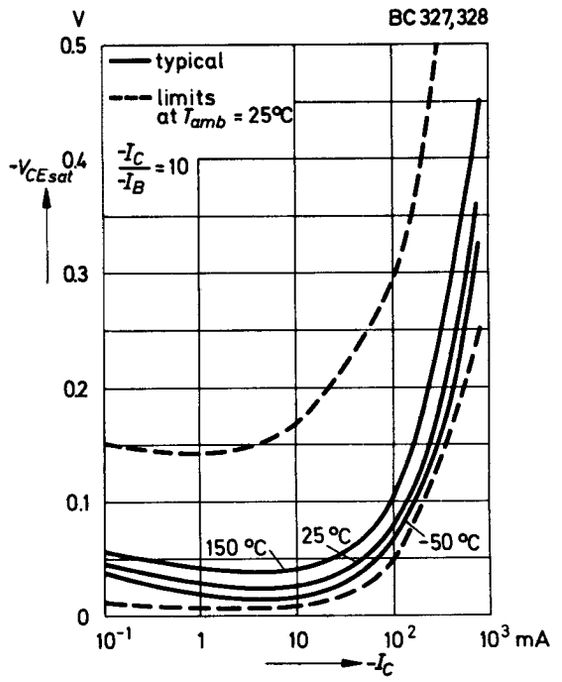
Common emitter collector characteristics



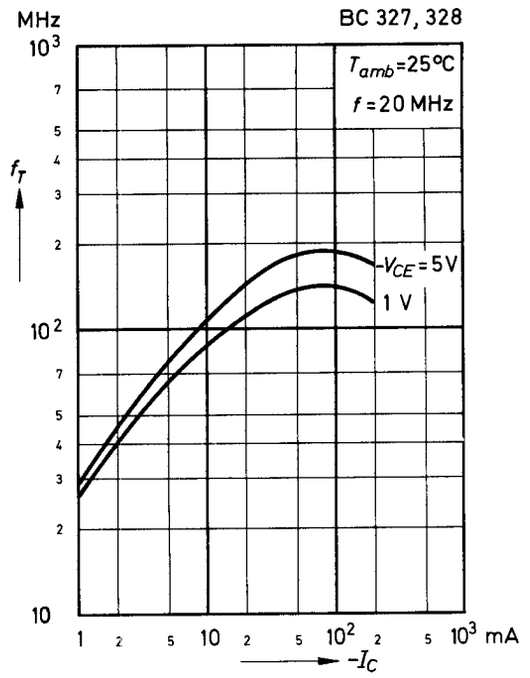
Common emitter collector characteristics



Collector saturation voltage versus collector current



Gain bandwith product versus collector current



Base saturation voltage versus collector current