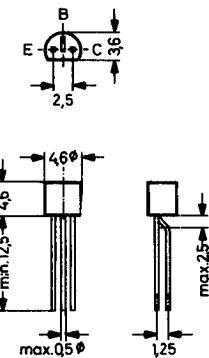


BC327, BC328

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		$-V_{CES}$	50	V
	BC328	$-V_{CES}$	30	V
Collector Emitter Voltage BC327		$-V_{CEO}$	45	V
	BC328	$-V_{CEO}$	25	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 $T_{amb} = 25^\circ\text{C}$		P_{tot}	625 ¹⁾	mW
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_s	–55 . . . +150	$^\circ\text{C}$

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

BC327, BC328

Characteristics at $T_{amb} = 25^\circ C$

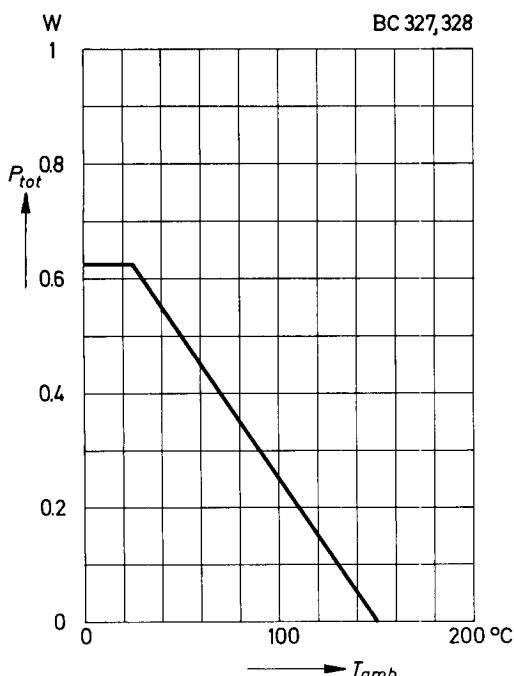
	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE} = 1 V$, $-I_C = 100 mA$ BC327, BC328 Current Gain Group 16 25 40	h_{FE}	100	—	630	—
	h_{FE}	100	160	260	—
	h_{FE}	150	250	420	—
	h_{FE}	240	400	630	—
at $-V_{CE} = 1 V$, $-I_C = 300 mA$ BC327, BC328 Current Gain Group 16 25 40	h_{FE}	60	—	—	—
	h_{FE}	60	130	—	—
	h_{FE}	100	200	—	—
	h_{FE}	170	320	—	—
Thermal Resistance to Ambient	R_{thA}	—	—	200 ¹⁾	K/W
Collector Cutoff Current at $-V_{CE} = 25 V$ BC328 at $-V_{CE} = 45 V$ BC327 at $-V_{CE} = 25 V$, $T_{amb} = 125^\circ C$ BC328 at $-V_{CE} = 45 V$, $T_{amb} = 125^\circ C$ BC327	$-I_{CES}$	—	2	100	nA
	$-I_{CES}$	—	2	100	nA
	$-I_{CES}$	—	—	10	μA
	$-I_{CES}$	—	—	10	μA
Collector Emitter Breakdown Voltage at $-I_C = 10 mA$ BC327 BC328	$-V_{(BR)CEO}$	45	—	—	V
	$-V_{(BR)CEO}$	25	—	—	V
Collector Emitter Breakdown Voltage at $-I_C = 0.1 mA$ BC327 BC328	$-V_{(BR)CES}$	50	—	—	V
	$-V_{(BR)CES}$	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

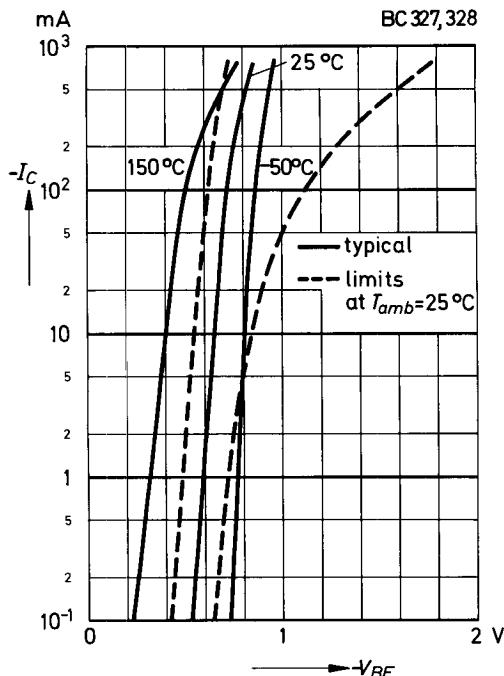
BC327, BC328

Admissible power dissipation versus ambient temperature

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

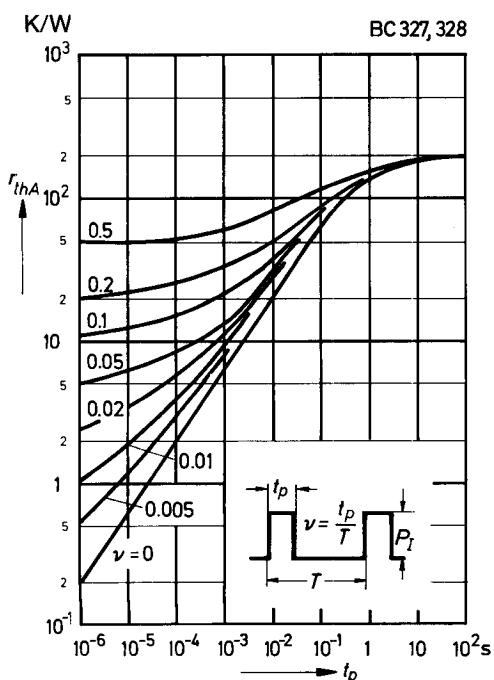


Collector current versus base emitter voltage

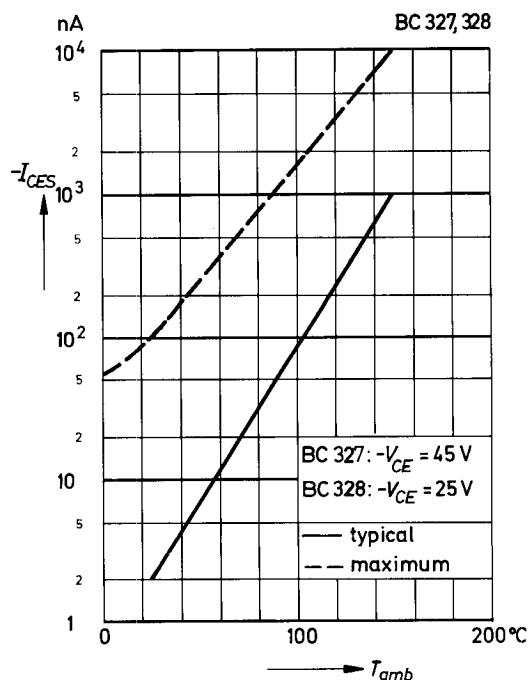


Pulse thermal resistance versus pulse duration

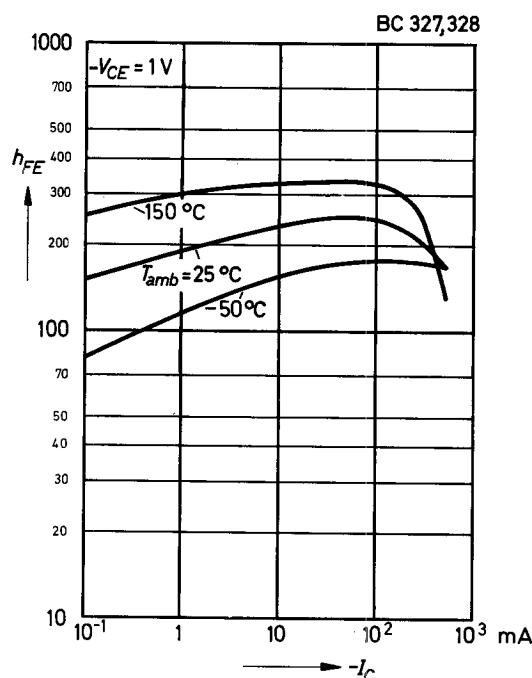
Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case



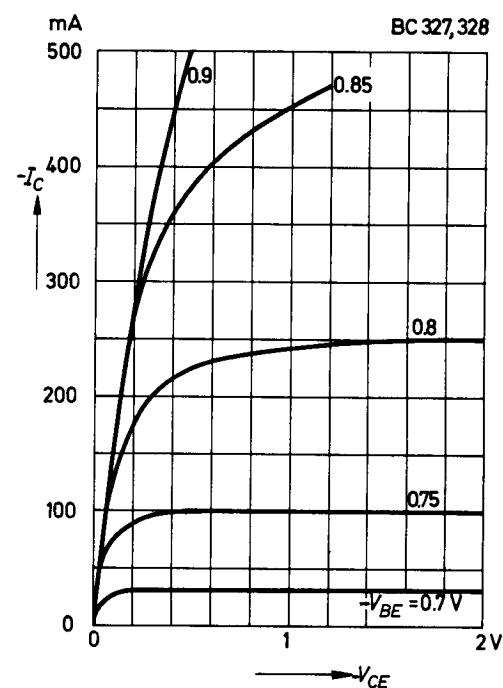
Collector cutoff current versus ambient temperature



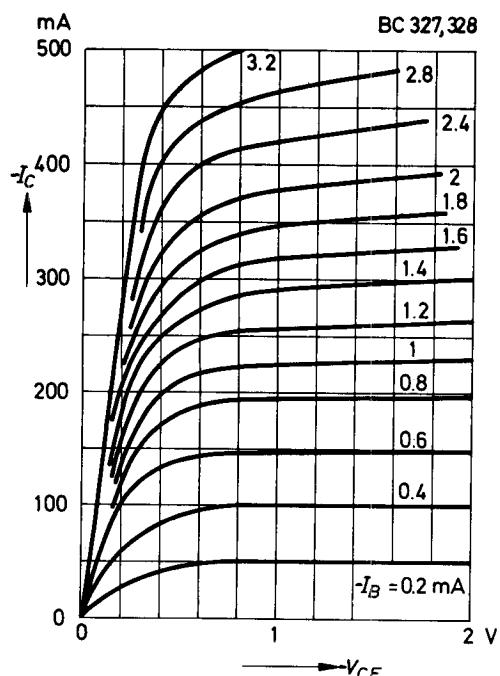
**DC current gain
versus collector current**



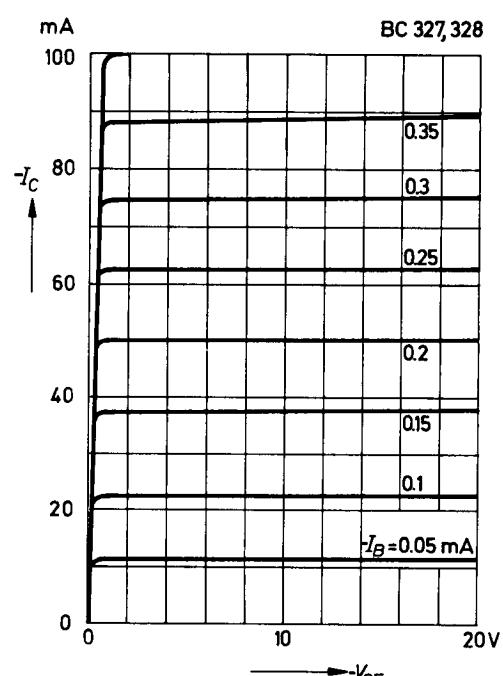
**Common emitter collector
characteristics**



**Common emitter collector
characteristics**

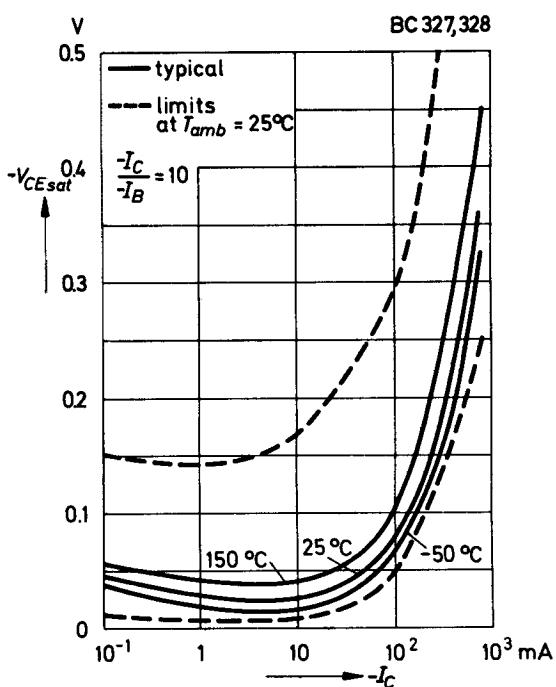


**Common emitter collector
characteristics**

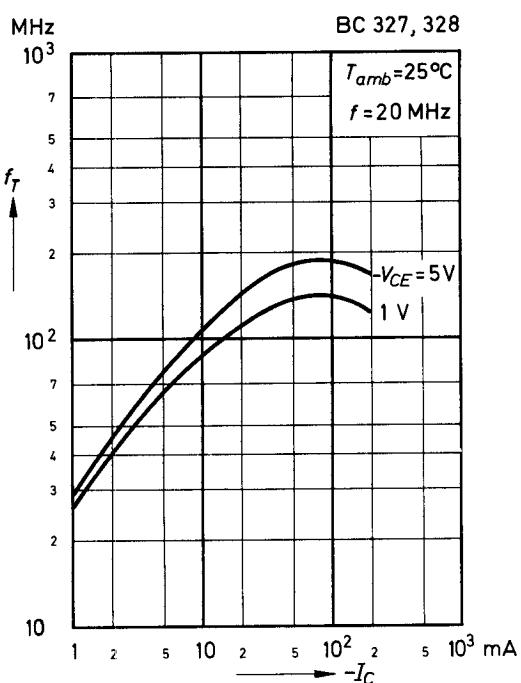


BC327, BC328

Collector saturation voltage versus collector current



Gain bandwidth product versus collector current



Base saturation voltage versus collector current

