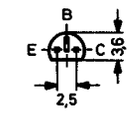
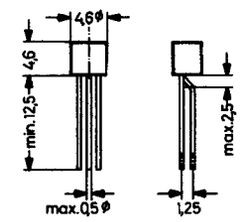
BC250

PNP Silicon Epitaxial Planar Transistor
for switching and amplifier applications

The transistor is subdivided into three groups A, B and C according to its DC current gain.





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

Weight about 0.18 g
Dimensions in mm

Absolute Maximum Ratings

	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	20	V
Collector Emitter Voltage	$-V_{CEO}$	20	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	100	mA
Power Dissipation at T_{amb} = 25 °C	P_{tot}	300[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

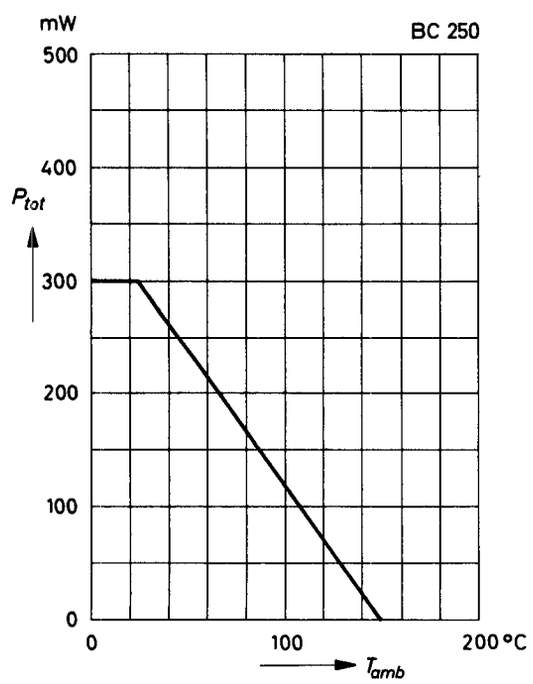
Characteristics at $T_j = 25\ °C$

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE} = 1\ V$, $-I_C = 1\ mA$ **Current Gain Group A** **B** **C**	 h_{FE} h_{FE} h_{FE}	 35 80 200	 – – –	 100 250 600	 – – –
Collector Saturation Voltage at $-I_C = 30\ mA$, $-I_B = 3\ mA$	$-V_{CEsat}$	–	0.4	–	V
Collector Cutoff Current at $-V_{CB} = 15\ V$	$-I_{CBO}$	–	–	100	nA
Emitter Cutoff Current at $-V_{EB} = 4\ V$	$-I_{EBO}$	–	–	100	nA
Gain Bandwidth Product at $-V_{CE} = 5\ V$, $-I_C = 10\ mA$, $f = 100\ MHz$	f_T	–	180	–	MHz
Collector Base Capacitance at $-V_{CBO} = 10\ V$, $f = 1\ MHz$	C_{CBO}	–	3	–	pF
Emitter Base Capacitance at $-V_{EBO} = 0.5\ V$, $f = 1\ MHz$	C_{EBO}	–	12	–	pF
Thermal Resistance Junction to Ambient	R_{thA}	–	–	400[1)]	K/W

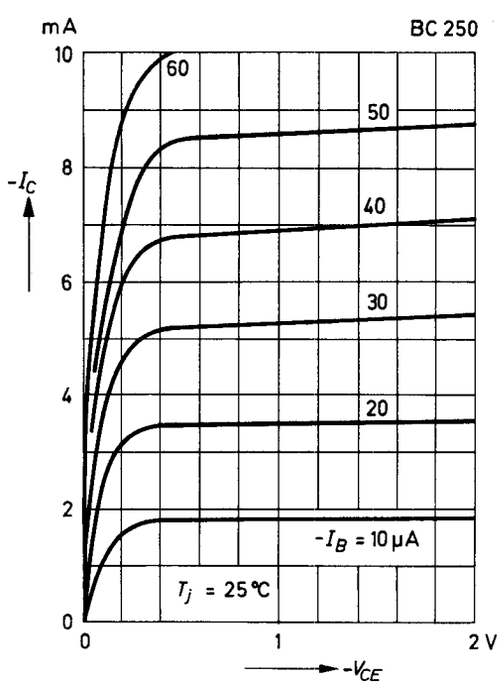
[1)] Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case

Admissible power dissipation versus ambient temperature

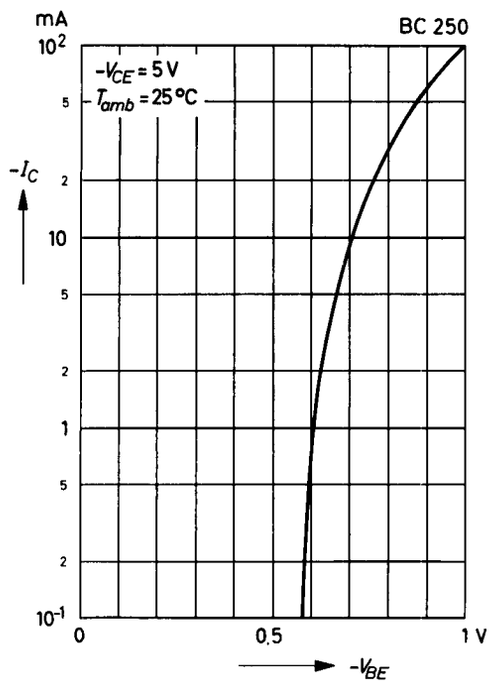
Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case



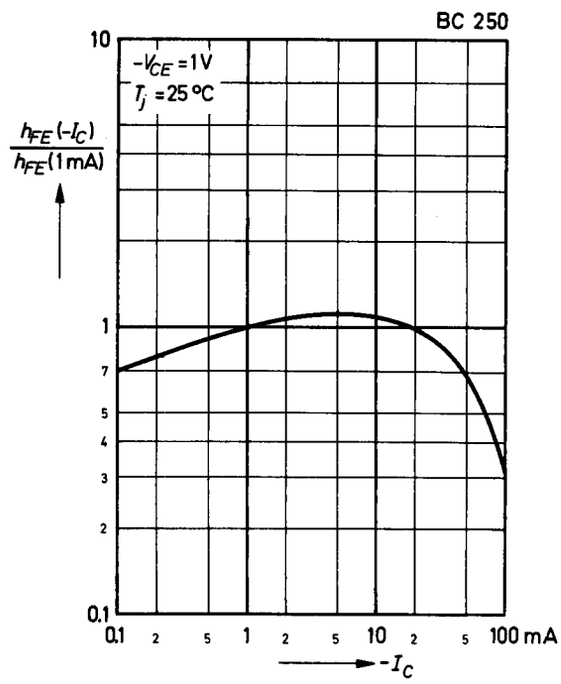
Common emitter collector characteristics



Collector current versus base emitter voltage



Relative DC current gain versus collector current



Collector cutoff current versus junction temperature