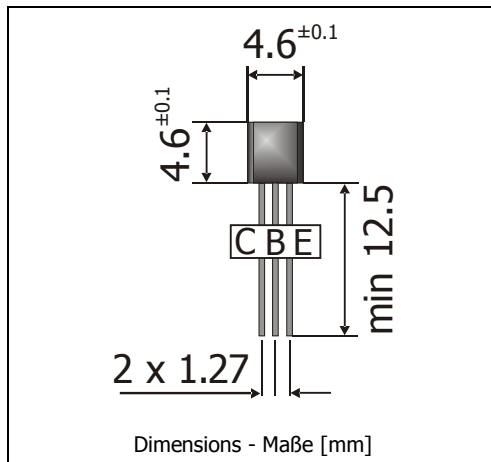


**BC327-xBK / BC328-xBK****PNP**

**General Purpose Si-Epitaxial Planar Transistors**  
**Si-Epitaxial Planar-Transistoren für universellen Einsatz**

**PNP**

Version 2010-06-23



Power dissipation  
Verlustleistung

625 mW

Plastic case  
Kunststoffgehäuse

TO-92  
(10D3)

Weight approx. – Gewicht ca.

0.18 g

Plastic material has UL classification 94V-0  
Gehäusematerial UL94V-0 klassifiziert

Special packaging bulk  
Sonder-Lieferform Schüttgut

**Maximum ratings (T<sub>A</sub> = 25°C)****Grenzwerte (T<sub>A</sub> = 25°C)**

			<b>BC327</b>	<b>BC328</b>
Collector-Emitter-volt. – Kollektor-Emitter-Spannung	E-B short	- V <sub>CES</sub>	50 V	30 V
Collector-Emitter-volt. – Kollektor-Emitter-Spannung	B open	- V <sub>CEO</sub>	45 V	25 V
Emitter-Base-voltage – Emitter-Basis-Spannung	C open	- V <sub>EBO</sub>	5 V	
Power dissipation – Verlustleistung		P <sub>tot</sub>	625 mW <sup>1)</sup>	
Collector current – Kollektorstrom (dc)		- I <sub>C</sub>	800 mA	
Peak Collector current – Kollektor-Spitzenstrom		- I <sub>CM</sub>	1 A	
Base current – Basisstrom		- I <sub>B</sub>	100 mA	
Junction temperature – Sperrschichttemperatur		T <sub>j</sub>	-55...+150°C	
Storage temperature – Lagerungstemperatur		T <sub>s</sub>	-55...+150°C	

**Characteristics (T<sub>j</sub> = 25°C)****Kennwerte (T<sub>j</sub> = 25°C)**

			<b>Min.</b>	<b>Typ.</b>	<b>Max.</b>
DC current gain – Kollektor-Basis-Stromverhältnis <sup>2)</sup>					
- V <sub>CE</sub> = 1 V, - I <sub>C</sub> = 100 mA	Group -16	h <sub>FE</sub>	100	160	250
	Group -25	h <sub>FE</sub>	160	250	400
	Group -40	h <sub>FE</sub>	250	400	630
- V <sub>CE</sub> = 1 V, - I <sub>C</sub> = 300 mA	Group -16	h <sub>FE</sub>	60	130	–
	Group -25	h <sub>FE</sub>	100	200	–
	Group -40	h <sub>FE</sub>	170	320	–
Collector-Emitter saturation voltage – Kollektor-Emitter-Sättigungsspg. <sup>2)</sup>					
- I <sub>C</sub> = 500 mA, - I <sub>B</sub> = 50 mA		- V <sub>CEsat</sub>	–	–	0.7 V

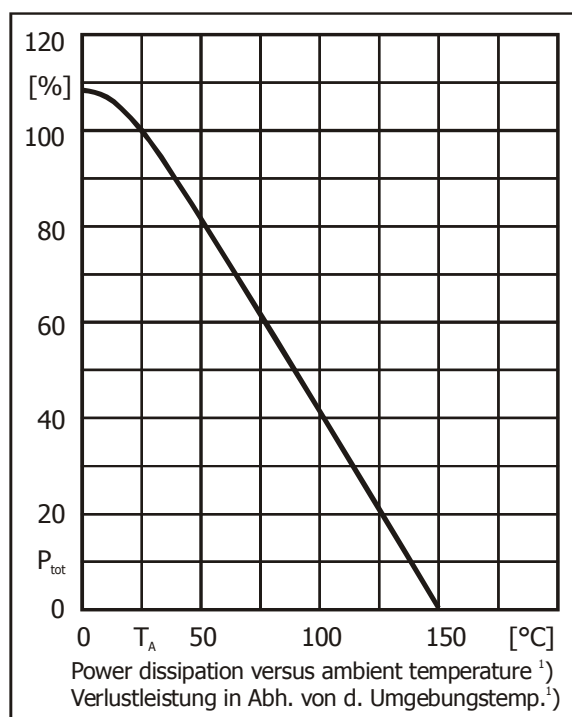
1 Valid, if leads are kept at ambient temperature at a distance of 2 mm from case

Gültig wenn die Anschlussdrähte in 2 mm Abstand vom Gehäuse auf Umgebungstemperatur gehalten werden

2 Tested with pulses t<sub>p</sub> = 300 μs, duty cycle ≤ 2% – Gemessen mit Impulsen t<sub>p</sub> = 300 μs, Schaltverhältnis ≤ 2%

**Characteristics ( $T_j = 25^\circ\text{C}$ )**
**Kennwerte ( $T_j = 25^\circ\text{C}$ )**

			Min.	Typ.	Max.
Base-Emitter-voltage – Basis-Emitter-Spannung <sup>2)</sup>					
- V <sub>CE</sub> = 1 V, - I <sub>C</sub> = 300 mA,	- V <sub>BE</sub>		–	–	1.2 V
Collector-Emitter cutoff current – Kollektor-Emitter-Reststrom					
- V <sub>CE</sub> = 45 V, (B-E short)	BC327	- I <sub>CES</sub>	–	2 nA	100 nA
- V <sub>CE</sub> = 25 V, (B-E short)	BC328	- I <sub>CES</sub>	–	2 nA	100 nA
- V <sub>CE</sub> = 45 V, T <sub>j</sub> = 125°C, (B-E short)	BC327	- I <sub>CES</sub>	–	–	10 µA
- V <sub>CE</sub> = 25 V, T <sub>j</sub> = 125°C, (B-E short)	BC328	- I <sub>CES</sub>	–	–	10 µA
Gain-Bandwidth Product – Transistfrequenz					
- V <sub>CE</sub> = 5 V, - I <sub>C</sub> = 10 mA, f = 50 MHz	f <sub>T</sub>		–	100 MHz	–
Collector-Base Capacitance – Kollektor-Basis-Kapazität					
- V <sub>CB</sub> = 10 V, I <sub>E</sub> = i <sub>e</sub> = 0, f = 1 MHz	C <sub>CB0</sub>		–	12 pF	–
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft	R <sub>thA</sub>	< 200 K/W <sup>1)</sup>			
Recommended complementary NPN transistors Empfohlene komplementäre NPN-Transistoren			BC337 / BC338		
Available current gain groups per type Lieferbare Stromverstärkungsgruppen pro Typ			BC327-16 BC327-25 BC327-40		BC328-16 BC328-25 BC328-40



2 Tested with pulses  $t_p = 300\text{ }\mu\text{s}$ , duty cycle  $\leq 2\%$  – Gemessen mit Impulsen  $t_p = 300\text{ }\mu\text{s}$ , Schaltverhältnis  $\leq 2\%$

1 Valid, if leads are kept at ambient temperature at a distance of 2 mm from case

Gültig wenn die Anschlussdrähte in 2 mm Abstand vom Gehäuse auf Umgebungstemperatur gehalten werden