

Order code	Manufacturer code	Description
81-0393	n/a	n/a

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The enclosed information is believed to be correct, Information may change without notice due to product improvement. Users should ensure that the product is suitable for their use. E. & O. E.	Revision A 20/02/2007

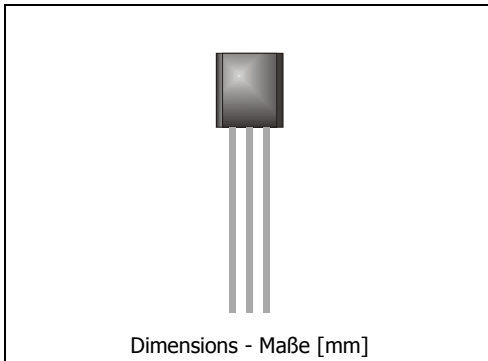
BC327-xBK / BC328-xBK


PNP

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

PNP

Version 2009-05-05



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_A = 25°C)
Grenzwerte (T_A = 25°C)

			BC327	BC328
Collector-Emitter-volt. – Kollektor-Emitter-Spannung	E-B short	- V _{CES}	50 V	30 V
Collector-Emitter-volt. – Kollektor-Emitter-Spannung	B open	- V _{CEO}	45 V	25 V
Emitter-Base-voltage – Emitter-Basis-Spannung	C open	- V _{EBO}	5 V	
Power dissipation – Verlustleistung		P _{tot}	625 mW ¹⁾	
Collector current – Kollektorstrom (dc)		- I _C	800 mA	
Peak Collector current – Kollektor-Spitzenstrom		- I _{CM}	1 A	
Base current – Basisstrom		- I _B	100 mA	
Junction temperature – Sperrschichttemperatur		T _j	-55...+150°C	
Storage temperature – Lagerungstemperatur		T _S	-55...+150°C	

Characteristics (T_j = 25°C)
Kennwerte (T_j = 25°C)

			Min.	Typ.	Max.
DC current gain – Kollektor-Basis-Stromverhältnis ²⁾					
- V _{CE} = 1 V, - I _C = 100 mA	Group -16	h _{FE}	100	160	250
	Group -25	h _{FE}	160	250	400
	Group -40	h _{FE}	250	400	630
- V _{CE} = 1 V, - I _C = 300 mA	Group -16	h _{FE}	60	130	–
	Group -25	h _{FE}	100	200	–
	Group -40	h _{FE}	170	320	–
Collector-Emitter saturation voltage – Kollektor-Emitter-Sättigungsspg. ²⁾					
- I _C = 500 mA, - I _B = 50 mA		- V _{CEsat}	–	–	0.7 V

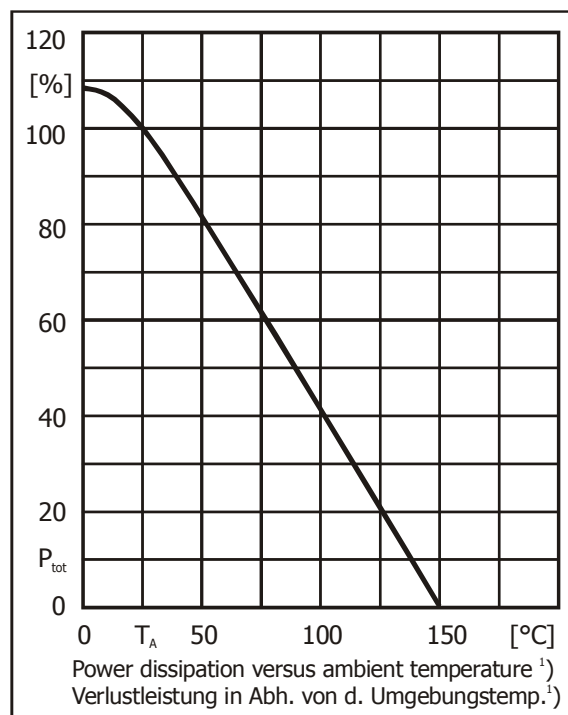
1 Valid, if leads are kept at ambient temperature at a distance of 2 mm from case

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

2 Tested with pulses t_p = 300 μs, duty cycle ≤ 2% – Gemessen mit Impulsen t_p = 300 μs, Schaltverhältnis ≤ 2%

Characteristics (T_j = 25°C)
Kennwerte (T_j = 25°C)

		Min.	Typ.	Max.
Base-Emitter-voltage – Basis-Emitter-Spannung ²⁾ - V _{CE} = 1 V, - I _C = 300 mA,	- V _{BE}	–	–	1.2 V
Collector-Emitter cutoff current – Kollektor-Emitter-Reststrom				
- V _{CE} = 45 V, (B-E short)	BC327 - I _{CES}	–	2 nA	100 nA
- V _{CE} = 25 V, (B-E short)	BC328 - I _{CES}	–	2 nA	100 nA
- V _{CE} = 45 V, T _j = 125°C, (B-E short)	BC327 - I _{CES}	–	–	10 μA
- V _{CE} = 25 V, T _j = 125°C, (B-E short)	BC328 - I _{CES}	–	–	10 μA
Gain-Bandwidth Product – Transitfrequenz - V _{CE} = 5 V, - I _C = 10 mA, f = 50 MHz	f _T	–	100 MHz	–
Collector-Base Capacitance – Kollektor-Basis-Kapazität - V _{CB} = 10 V, I _E = i _e = 0, f = 1 MHz	C _{CBO}	–	12 pF	–
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft	R _{thA}	< 200 K/W ¹⁾		
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 μs, duty cycle ≤ 2% – Gemessen mit Impulsen t_p = 300 μs, Schaltverhältnis ≤ 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