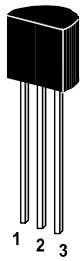
PNP **Si-Epitaxial PlanarTransistors** **PNP**



Standard Pinning
1 = C 2 = B 3 = E

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

Standard packaging taped in ammo pack
Standard Lieferform gegurtet in Ammo-Pack

Maximum ratings (T_A = 25˚C) **Grenzwerte (T_A = 25˚C)**

			BC 327	BC 328
Collector-Emitter-voltage	B open	$-V_{CE0}$	45 V	25 V
Collector-Emitter-voltage	B shorted	$-V_{CES}$	50 V	30 V
Emitter-Base-voltage	C open	$-V_{EB0}$	5 V	
Power dissipation – Verlustleistung		P_{tot}	625 mW [1])	
Collector current – Kollektorstrom (DC)		$-I_C$	800 mA	
Peak Coll. current – Kollektor-Spitzenstrom		$-I_{CM}$	1 A	
Base current – Basisstrom		$-I_B$	100 mA	
Junction temp. – Sperrschichttemperatur		T_j	150˚C	
Storage temperature – Lagerungstemperatur		T_S	- 65…+ 150˚C	

Datasheet Support

Characteristics, T_j = 25˚C **Kennwerte, T_j = 25˚C**

			Min.	Typ.	Max.
DC current gain – Kollektor-Basis-Stromverhältnis					
$-V_{CE}$ = 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	–

[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 von Gehäuse auf Umgebungstemperatur gehalten werden

Characteristics (T_j = 25˚C) **Kennwerte (T_j = 25˚C)**

			Min.	Typ.	Max.
Collector-Emitter cutoff current – Kollektorreststrom					
- V_{CE} = 45 V	BC 327	- I_{CES}	–	2 nA	100 nA
- V_{CE} = 25 V	BC 328	- I_{CES}	–	2 nA	100 nA
- V_{CE} = 45 V, T_j = 125˚C	BC 327	- I_{CES}	–	–	10 µA
- V_{CE} = 25 V, T_j = 125˚C	BC 328	- I_{CES}	–	–	10 µA
Collector-Emitter breakdown voltage Collector-Emitter Durchbruchspannung					
- I_C = 10 mA	BC 327	- $V_{(BR)CES}$	20 V	–	–
	BC 328	- $V_{(BR)CES}$	45 V	–	–
- I_C = 0.1 mA	BC 327	- $V_{(BR)CES}$	30 V	–	–
	BC 328	- $V_{(BR)CES}$	50 V	–	–
Emitter-Base breakdown voltage Emitter-Basis-Durchbruchspannung					
- I_E = 0.1 mA		- $V_{(BR)EB0}$	5 V	–	–
Collector saturation volt. – Kollektor-Sättigungsspannung					
- I_C = 500 mA, - I_B = 50 mA		- V_{CEsat}	–	–	0.7 V
Base-Emitter voltage – Basis-Emitter-Spannung					
- V_{CE} = 1 V, - I_C = 300 mA		- V_{BE}	–	–	1.2 V
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_{CB0}	–	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			BC 337 / BC 338		

Available current gain groups per type Lieferbare Stromverstärkungsgruppen pro Typ	BC 327-16 BC 328-16	BC 327-25 BC 328-25	BC327-40 BC328-40

[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 von Gehäuse auf Umgebungstemperatur gehalten werden