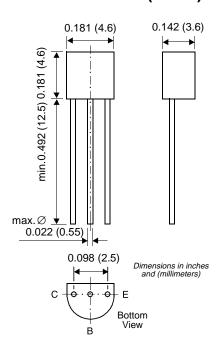




TO-226AA (TO-92)



Features

- 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 BC327 and BC338 are recommended.
- On special request, these transistors are also manufactured in the pin configuration TO-18.

Mechanical Data

Case: TO-92 Plastic Package

Weight: approx. 0.18g

Packaging Codes/Options:

E6/Bulk - 5K per container E7/4K per Ammo tape

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameters		Symbols	Value	Units	
Collector-Emitter Voltage	BC327 BC328	-Vces	50 30	V	
Collector-Emitter Voltage	BC327 BC328	-VCEO	45 25	V	
Emitter-Base Voltage		-VEBO	5	V	
Collector Current		-I _C	800	mA	
Peak Collector Current		-ICM	1	А	
Base Current		-IB	100	mA	
Power Dissipation at Tamb = 25°C		Ptot	625 ⁽¹⁾	mW	
Thermal Resistance Junction to Ambient Air		Rөja	200 ⁽¹⁾	°C/W	
Junction Temperature		Tj	150	°C	
Storage Temperature Range		Ts	- 65 to +150	°C	

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

BC327 thru BC328

Small Signal Transistors (PNP)

Electrical Characteristics (TJ = 25°C unless otherwise noted)

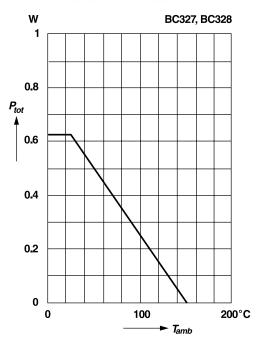
Parameter	Symbol	Test Condition	Min	Тур	Max	Unit
Current Gain Group -10 -29	hFE	-VCE = 1 V, -IC = 100 mA	100 160 250	160 250 400	250 400 630	
DC Current Gain Current Gain Group -10 -24		-V _{CE} = 1 V, -I _C = 300 mA	60 100 170	130 200 320	_ _ _	_
Collector-Emitter Cutoff Current BC322 BC322 BC322	-ICES	-VCE = 45 V -VCE = 25 V -VCE = 45 V, T _{amb} = 125°C -VCE = 25 V, T _{amb} = 125°C		2 2 —	100 100 10 10	nA nA μA μA
Collector Saturation Voltage	-VCEsat	-IC = 500 mA, -IB = 50 mA	_	_	0.7	V
Base-Emitter Voltage	-VBE	-VCE = 1 V, -IC = 300 mA	_	_	1.2	V
Collector-Emitter Breakdown Voltage BC328	I-\/(DD)CEO	-I _C = 10 mA	45 25	_	_	V
Collector-Emitter Breakdown Voltage BC328	-\/(pp)ccc	-I _C = 0.1 mA	50 30	_	_	V
Emitter-Base Breakdown Voltage	-V(BR)EBO	-IE = 0.1 mA	5	_	_	V
Gain-Bandwidth Product	fτ	-VcE = 5 V, -lc = 10 mA f = 50 MHz	_	100	_	MHz
Collector-Base Capacitance	Ссво	-VcB = 10 V, f = 1 MHz	_	12	_	pF



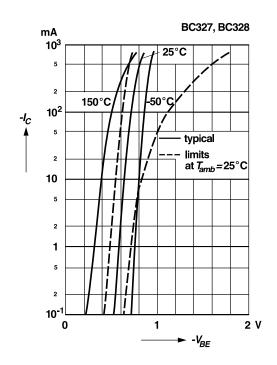
Ratings and Characteristic Curves

Admissible power dissipation versus ambient temperature

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

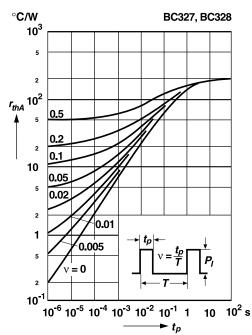


Collector current versus base-emitter voltage

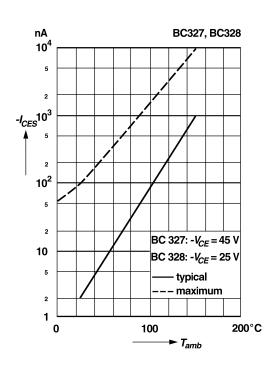


Pulse thermal resistance versus pulse duration

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



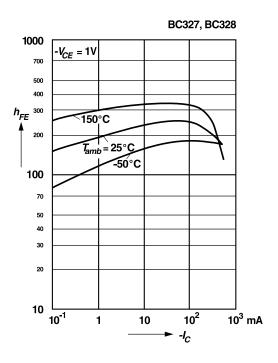
Collector-emitter cutoff current versus ambient temperature



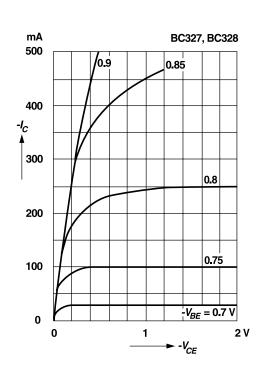


Ratings and Characteristic Curves

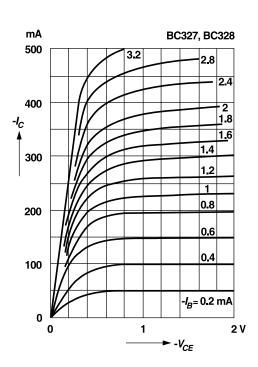
DC current gain versus collector current



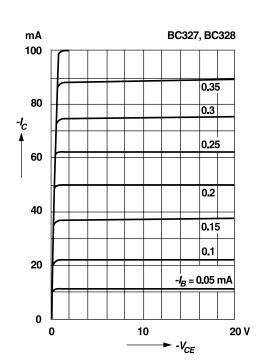
Common emitter collector characteristics



Common emitter collector characteristics



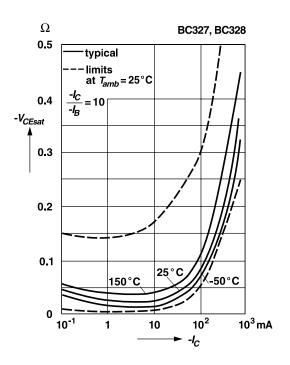
Common emitter collector characteristics



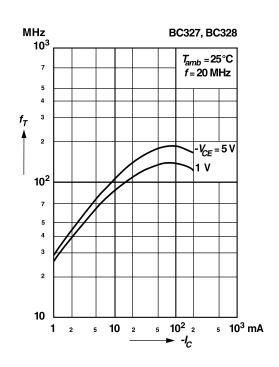


Ratings and Characteristic Curves

Collector saturation voltage versus collector current



Gain-bandwidth product versus collector current



Base saturation voltage versus collector current

