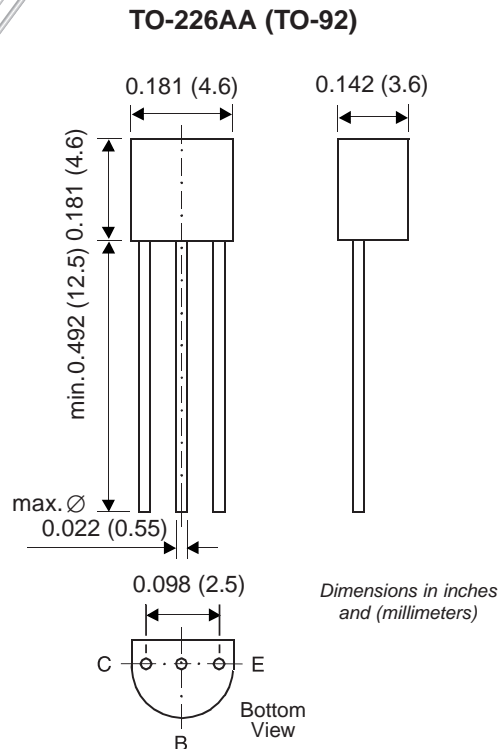
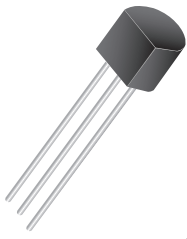


Small Signal Transistors (PNP)



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, 20K/box

E7/4K per Ammo mag., 20K/box

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

Parameter		Symbol	Value	Unit
Collector-Emitter Voltage	BC327	$-V_{CES}$	50	V
	BC328		30	
Collector-Emitter Voltage	BC327	$-V_{CEO}$	45	V
	BC328		25	
Emitter-Base Voltage		$-V_{EBO}$	5	V
Collector Current		$-I_C$	800	mA
Peak Collector Current		$-I_{CM}$	1	A
Base Current		$-I_B$	100	mA
Power Dissipation at $T_{amb} = 25^\circ\text{C}$		P_{tot}	625 ⁽¹⁾	mW
Thermal Resistance Junction to Ambient Air		$R_{\theta JA}$	200 ⁽¹⁾	$^\circ\text{C}/\text{W}$
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_S	-65 to +150	$^\circ\text{C}$

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

BC327 thru BC328

Vishay Semiconductors
formerly General Semiconductor



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

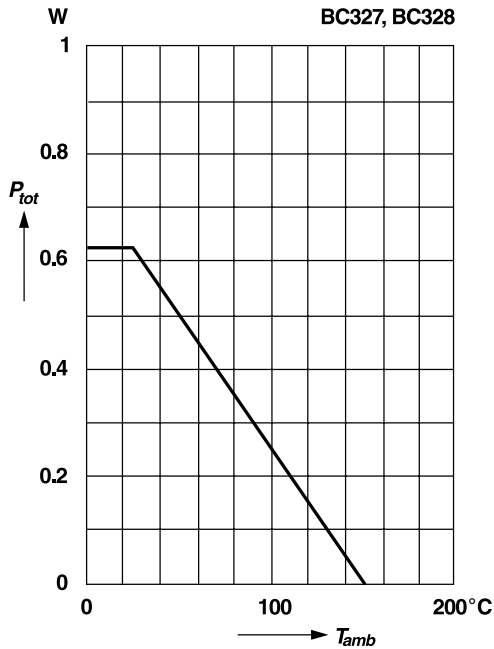
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
DC Current Gain	Current Gain Group -16 -25 -40	$-V_{CE} = 1\text{ V}, -I_C = 100\text{ mA}$	100	160	250	—
			160	250	400	
			250	400	630	
	Current Gain Group -16 -25 -40	$-V_{CE} = 1\text{ V}, -I_C = 300\text{ mA}$	60	130	—	
			100	200	—	
			170	320	—	
Collector-Emitter Cutoff Current	BC327	$-V_{CE} = 45\text{ V}$	—	2	100	nA
	BC328	$-V_{CE} = 25\text{ V}$	—	2	100	nA
	BC327	$-V_{CE} = 45\text{ V}, T_{amb} = 125^\circ\text{C}$	—	—	10	μA
	BC328	$-V_{CE} = 25\text{ V}, T_{amb} = 125^\circ\text{C}$	—	—	10	μA
Collector Saturation Voltage	$-V_{CEsat}$	$-I_C = 500\text{ mA}, -I_B = 50\text{ mA}$	—	—	0.7	V
Base-Emitter Voltage	$-V_{BE}$	$-V_{CE} = 1\text{ V}, -I_C = 300\text{ mA}$	—	—	1.2	V
Collector-Emitter Breakdown Voltage	BC327	$-I_C = 10\text{ mA}$	45	—	—	V
	BC328		25	—	—	
Collector-Emitter Breakdown Voltage	BC327	$-I_C = 0.1\text{ mA}$	50	—	—	V
	BC328		30	—	—	
Emitter-Base Breakdown Voltage	$-V_{(BR)EBO}$	$-I_E = 0.1\text{ mA}$	5	—	—	V
Gain-Bandwidth Product	f_T	$-V_{CE} = 5\text{ V}, -I_C = 10\text{ mA}$ $f = 50\text{ MHz}$	—	100	—	MHz
Collector-Base Capacitance	CCBO	$-V_{CB} = 10\text{ V}, f = 1\text{ MHz}$	—	12	—	pF



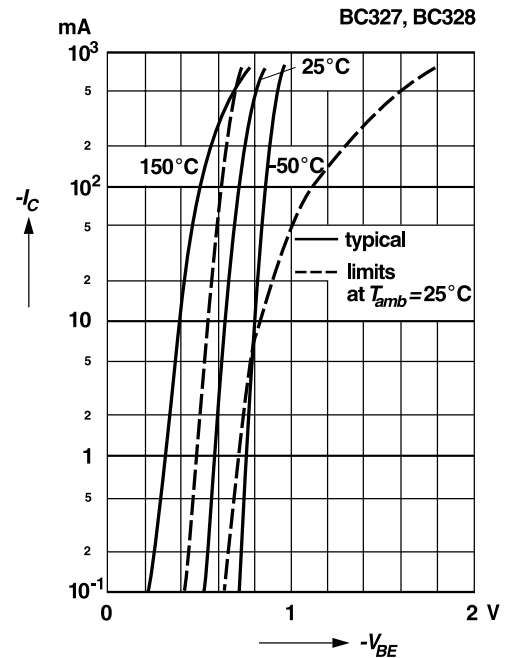
Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Admissible power dissipation versus ambient temperature

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

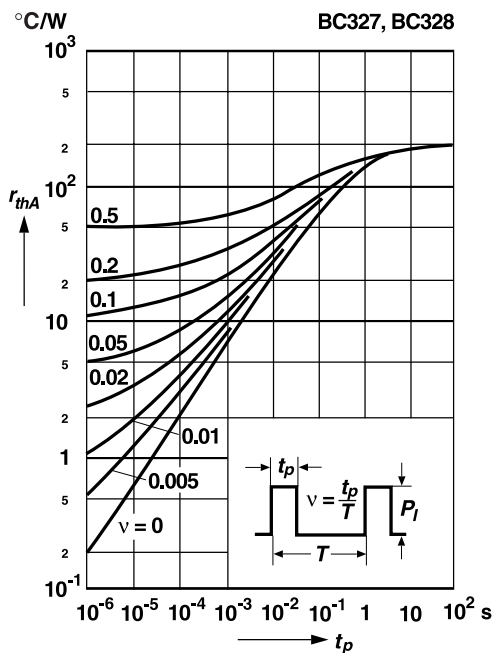


Collector current versus base-emitter voltage

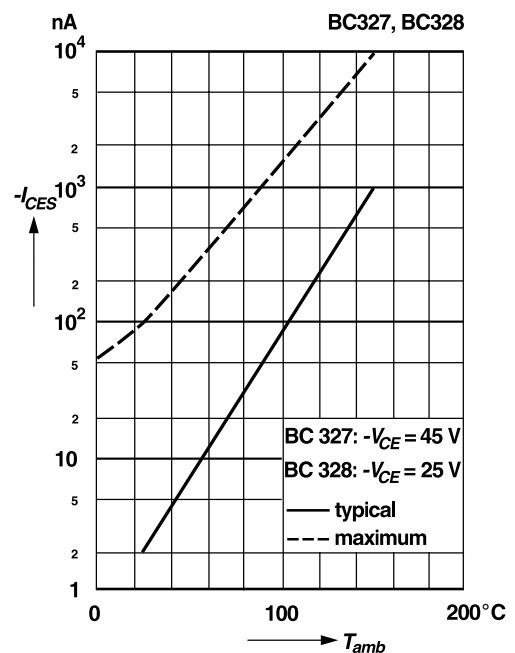


Pulse thermal resistance versus pulse duration

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



Collector-emitter cutoff current versus ambient temperature



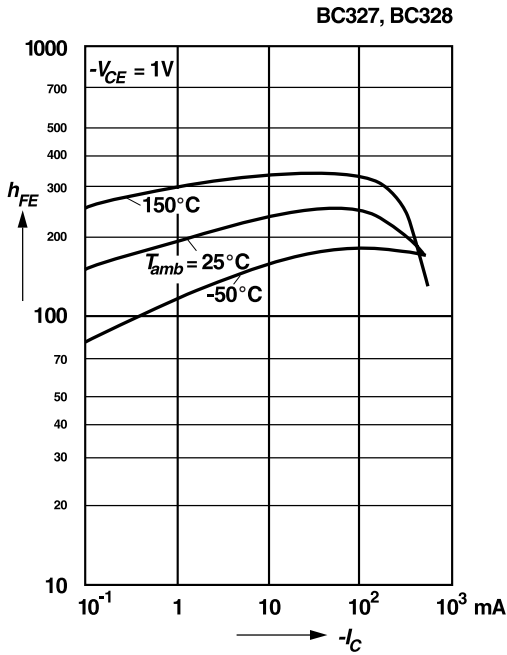
BC327 thru BC328

Vishay Semiconductors
formerly General Semiconductor

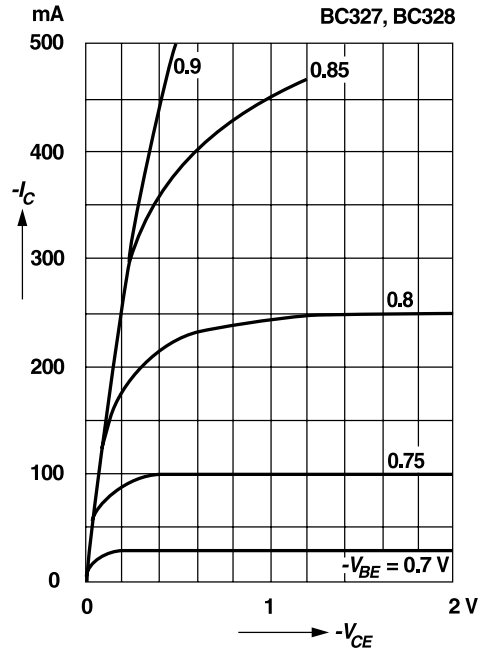


Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

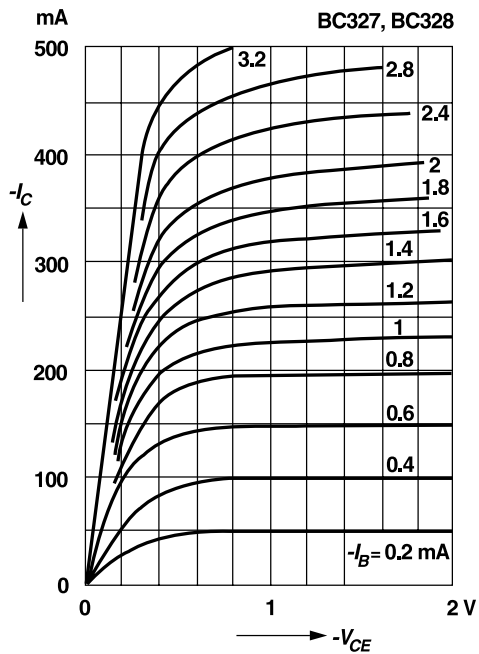
DC current gain versus collector current



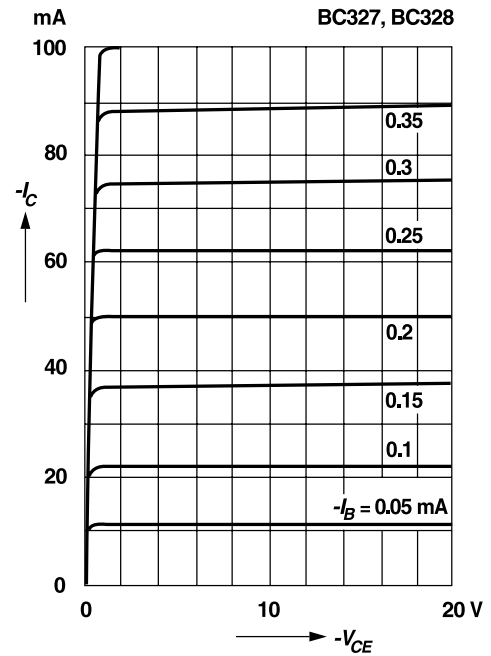
Common emitter collector characteristics



Common emitter collector characteristics

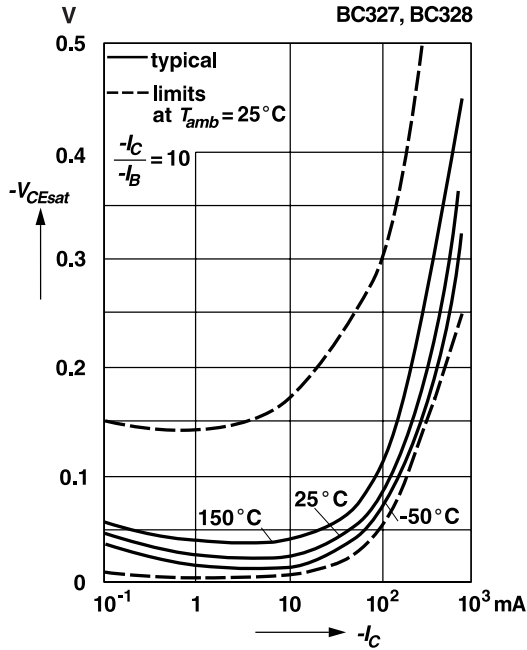


Common emitter collector characteristics

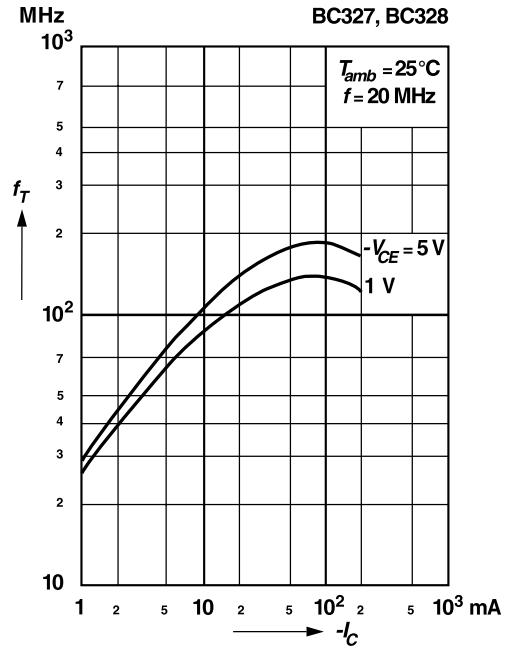


Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

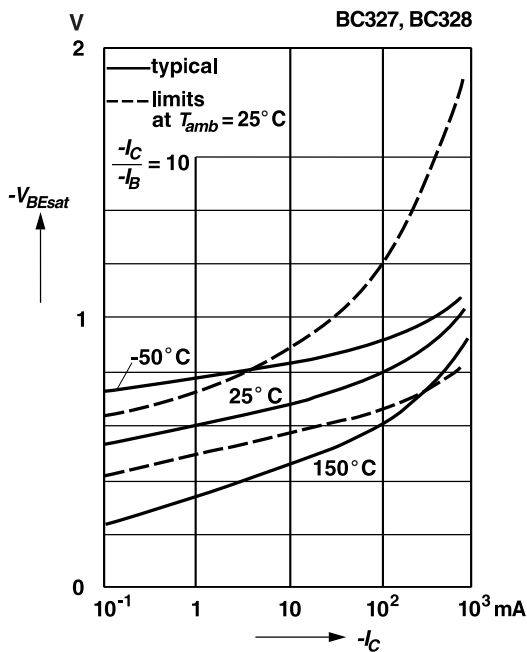
Collector saturation voltage versus collector current



Gain-bandwidth product versus collector current



Base saturation voltage versus collector current



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Datasheets for electronics components.