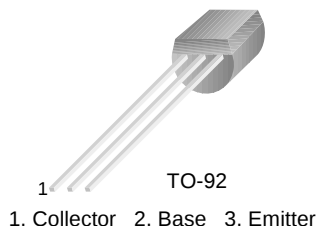


BC327A

PNP Epitaxial Silicon Transistor

Switching and Amplifier Applications

- Suitable for AF-Driver stages and low power output stages



Absolute Maximum Ratings * $T_a = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CES}	Collector-Emitter Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current (DC)	-800	mA
P_C	Collector Power Dissipation	625	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ\text{C}$

Electrical Characteristics $T_a = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}$, $I_B = 0$	-60			V
BV_{CES}	Collector-Emitter Breakdown Voltage	$I_C = -100\mu\text{A}$, $V_{BE} = 0$	-60			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = -100\mu\text{A}$, $I_C = 0$	-5			V
I_{CES}	Collector Cut-off Current	$V_{CE} = -45\text{V}$, $V_{BE} = 0$			-100	nA
h_{FE1} h_{FE2}	DC Current Gain	$V_{CE} = -1\text{V}$, $I_C = -100\text{mA}$ $V_{CE} = -1\text{V}$, $I_C = -500\text{mA}$	100 40		400	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$			-0.7	V
$V_{BE(on)}$	Base-Emitter On Voltage	$V_{CE} = -1\text{V}$, $I_C = -300\text{mA}$			-1.2	V
f_T	Current Gain Bandwidth Product	$V_{CE} = -5\text{V}$, $I_C = -10\text{mA}$, $f = 20\text{MHz}$		100		MHz
C_{ob}	Output Capacitance	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$		12		pF

Typical Performance Characteristics

Figure 1. Static Characteristic

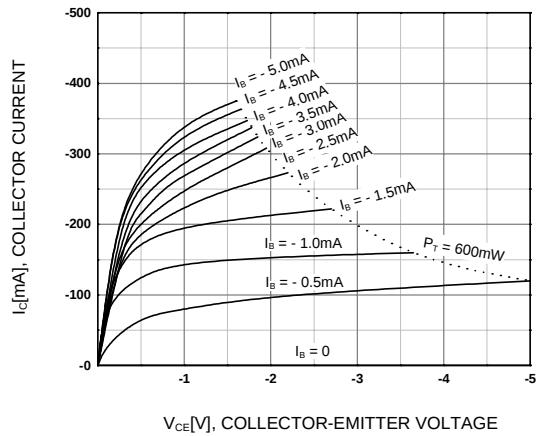


Figure 2. Static Characteristic

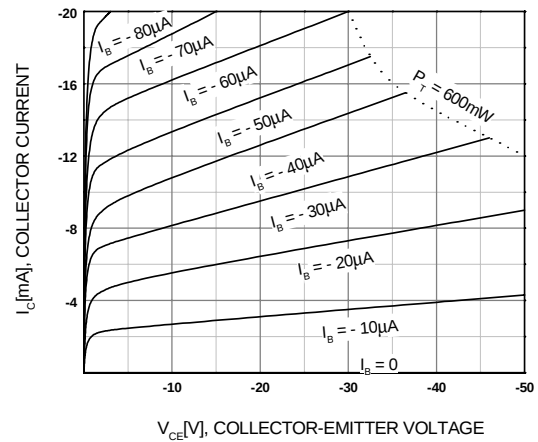


Figure 3. DC Current Gain

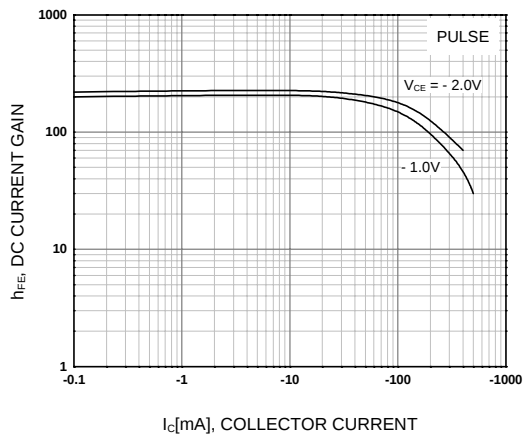


Figure 4. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

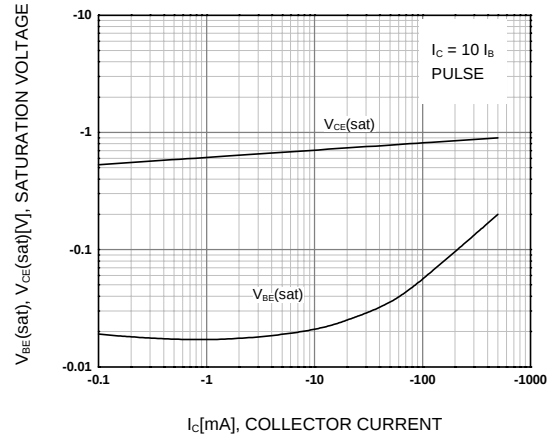


Figure 5. Base-Emitter On Voltage

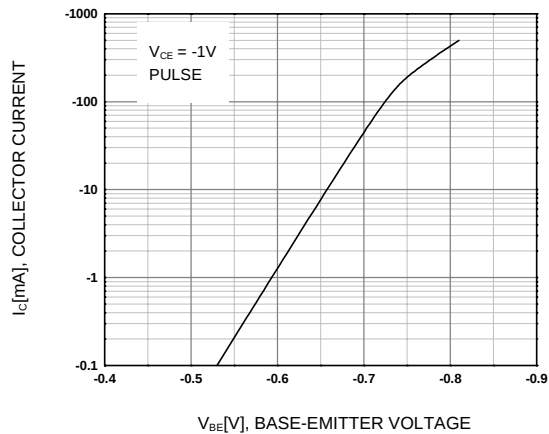
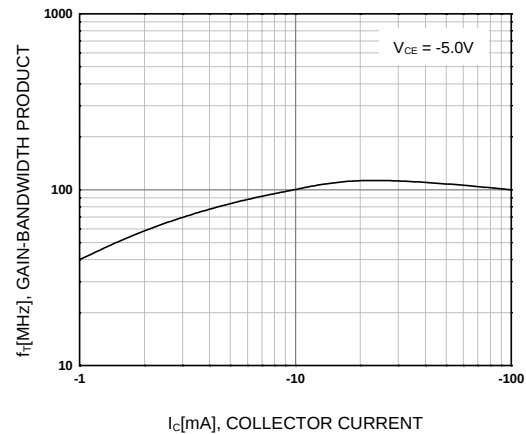
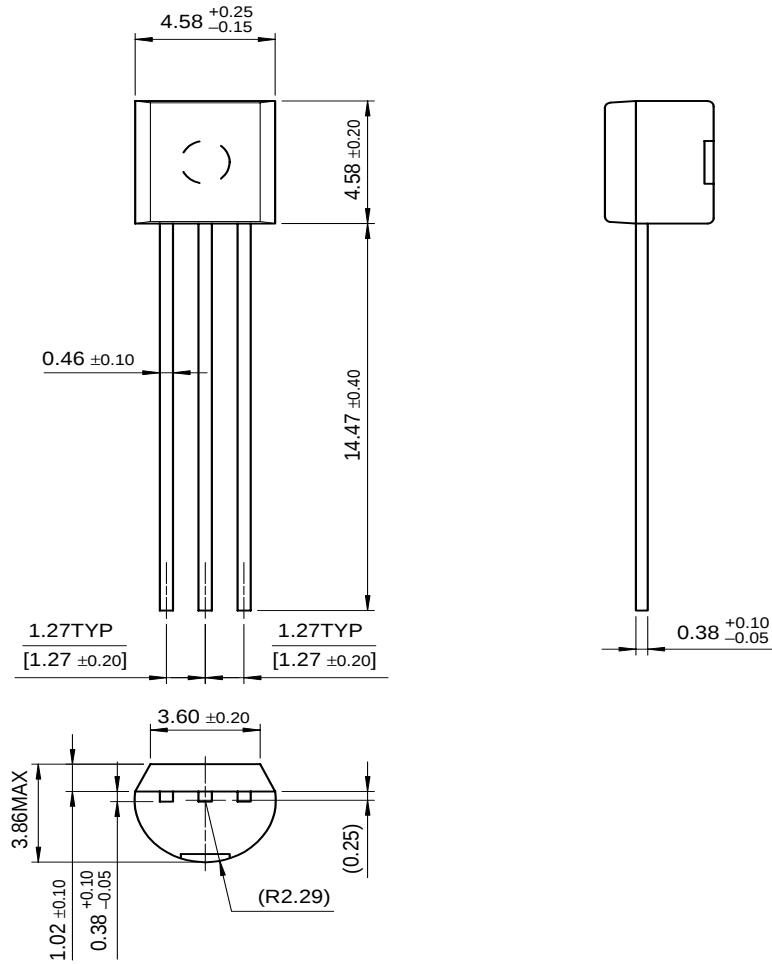


Figure 6. Gain Bandwidth Product



Mechanical Dimensions

TO-92



Dimensions in Millimeters

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E ² C MOS™	i-Lo™	OCX™	μSerDes™	VCX™
EnSigna™	ImpliedDisconnect™	OCXPro™	SILENT SWITCHER [®]	Wire™
FACT™	IntelliMAX™	OPTOLOGIC [®]	SMART START™	
FACT Quiet Series™		OPTOPLANAR™	SPM™	
		PACMAN™	Stealth™	
Across the board. Around the world.™		POP™	SuperFET™	
The Power Franchise [®]		Power247™	SuperSOT™-3	
Programmable Active Droop™		PowerEdge™	SuperSOT™-6	

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