

BC327 SERIES

PNP GENERAL PURPOSE TRANSISTORS

VOLTAGE	45	POWER	625mW
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FEATURES

General purpose amplifier applications

PNP epitaxial silicon, planar design

Collector current $I_C = -800\text{mA}$

MECHANICAL DATA

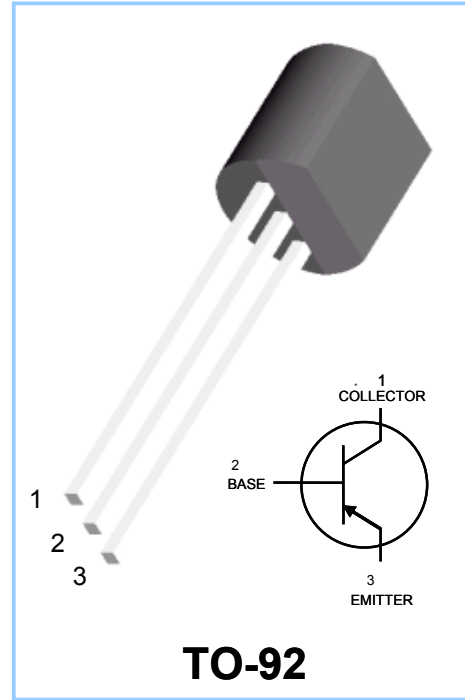
Case: TO-92

Terminals: Solderable per MIL-STD-202, Method 208

Device Marking: BC327-16: 7A

BC327-25: 7B

BC327-40: 7C



ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	Value	UNIT
Collector - Emitter Voltage	V_{CE0}	-45	V
Collector - Base Voltage	V_{CB0}	-50	V
Emitter - Base Voltage	V_{EB0}	-5.0	V
Collector Current - Continuous	I_C	-800	mA
Max Power Dissipation (Note 1)	P_{TOT}	625	mW
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 150	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	Value	UNIT
Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	200	$^{\circ}\text{C/W}$

Note 1: Transistor mounted on FR-5 board 1.0 x 0.75 x 0.062 in.

ELECTRICAL CHARACTERISTICS ($T_J=25^\circ\text{C}$, unless otherwise noted)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
Collector - Emitter Breakdown Voltage ($I_C=-10\text{mA}$, $I_B=0$)	$V_{(BR)CE0}$	-45	-	-	V
Collector - Emitter Breakdown Voltage ($V_{EB}=0\text{V}$, $I_C=-100\mu\text{A}$)	$V_{(BR)CES}$	-50	-	-	V
Emitter - Base Breakdown Voltage ($I_E=-10\mu\text{A}$, $I_C=0$)	$V_{(BR)EB0}$	-5.0	-	-	V
Emitter-Base Cutoff Current ($V_{EB}=-4\text{V}$)	I_{EBO}	-	-	-100	nA
Collector-Base Cutoff Current ($V_{CB}=-30\text{V}$, $I_E=0$)	I_{CBO}	-	-	-100	nA
Collector Cutoff Current ($V_{CE}=-45\text{V}$, $V_{BE}=0$)	I_{CES}	-	-	-100	nA
DC Current Gain ($I_C=-100\text{mA}$, $V_{CE}=-1\text{V}$)	BC337-16 BC337-25 BC337-40 h_{FE}	100 160 250	- - -	250 400 630	-
($I_C=-300\text{mA}$, $V_{CE}=-1\text{V}$)		40	-	-	
Collector - Emitter Saturation Voltage ($I_C=-500\text{mA}$, $I_B=-50\text{mA}$)	$V_{CE(SAT)}$	-	-	-0.7	V
Base - Emitter Voltage ($I_C=-300\text{mA}$, $V_{CE}=-1.0\text{V}$)	$V_{BE(ON)}$	-	-	-1.2	V
Collector - Base Capacitance ($V_{CB}=-10\text{V}$, $I_E=0$, $f=1\text{MHz}$)	C_{CBO}	-	5.0	-	pF
Current Gain - Bandwidth Product ($I_C=-10\text{mA}$, $V_{CE}=-5\text{V}$, $f=100\text{MHz}$)	f_T	-	210	-	MHz

ELECTRICAL CHARACTERISTICS CURVES

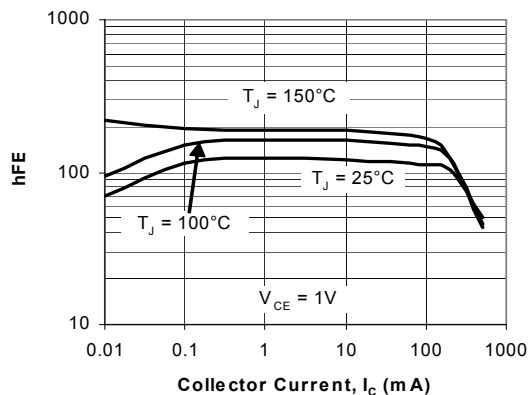


Fig. 1. BC337-16 Typical h_{FE} vs. I_C

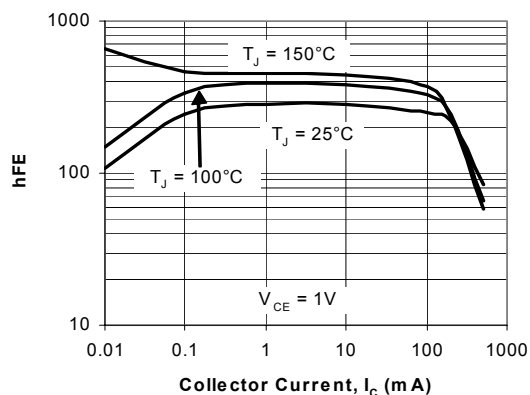


Fig. 2. BC337-25 Typical h_{FE} vs. I_C

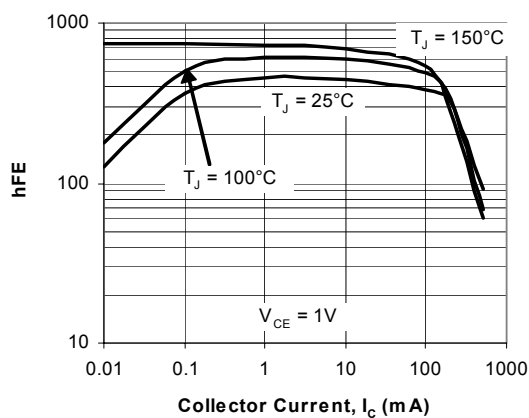


Fig. 3. BC337-40 Typical h_{FE} vs. I_C

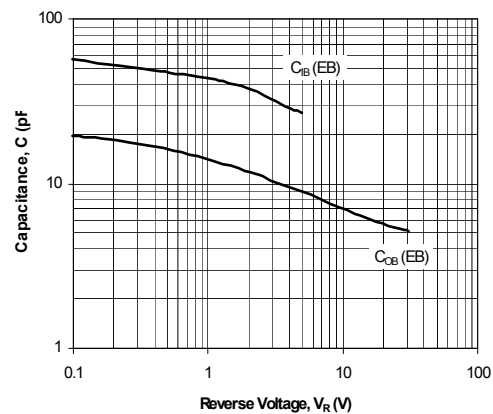
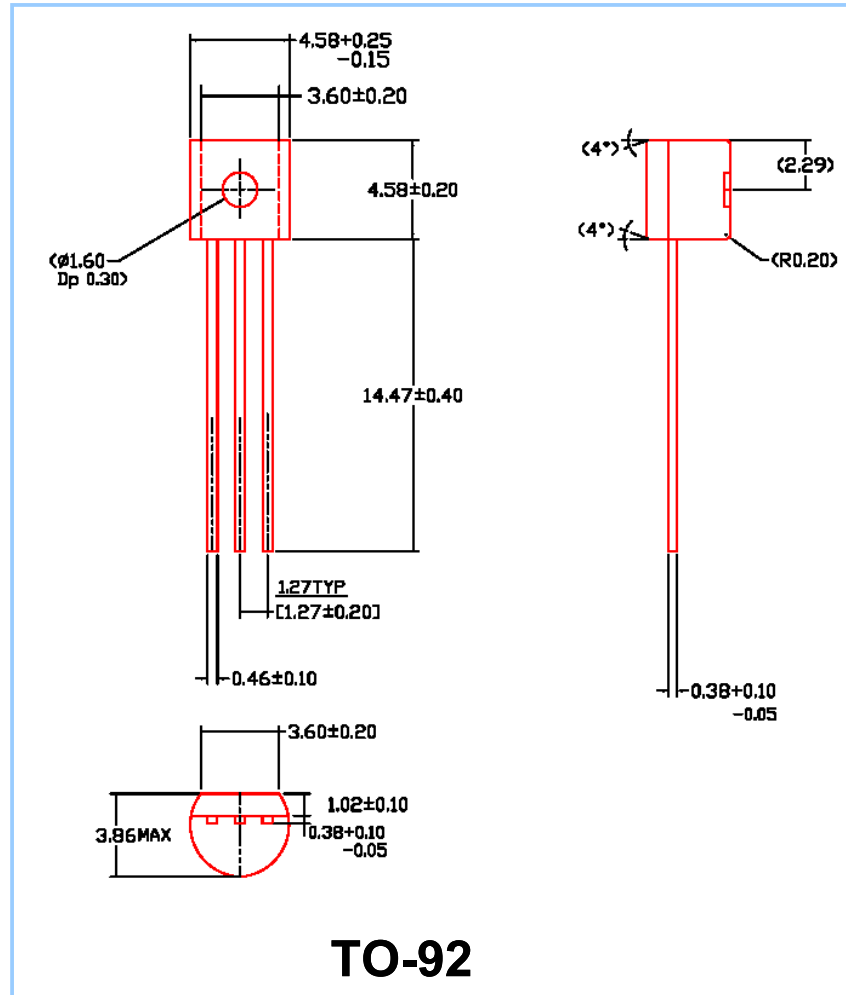


Fig. 4. Typical Capacitances

TO-92 PACKAGE OUTLINE



ORDER INFORMATION

BC327-xx B – Bulk 5,000 per box
BC327-xx T/R – Tape and Reel, 2,000 per reel
BC327-xx A/B – Ammo Pack, 2,000 Per Ammo Pack

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