

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

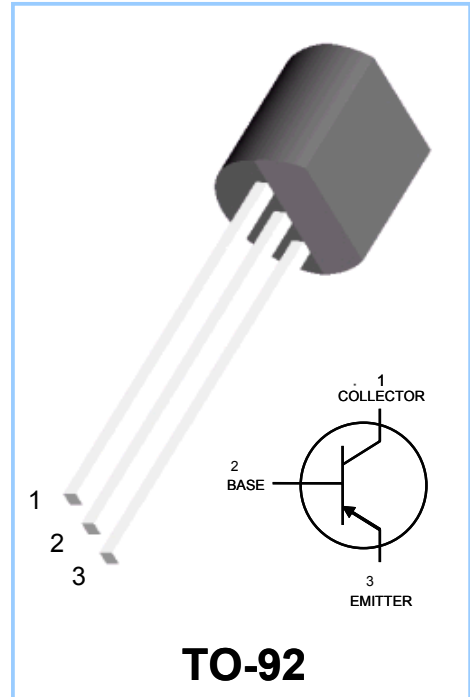
Case: TO-92

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	$^{\circ}\text{C}/\text{W}$

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

ELECTRICAL CHARACTERISTICS (T_J=25 C, unless otherwise noted)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
Collector - Emitter Breakdown Voltage (I _C =-10mA, I _B =0)	V _{(BR)CE0}	-45	-	-	V
Collector - Emitter Breakdown Voltage (V _{EB} =0V, I _C =-100uA)	V _{(BR)CES}	-50	-	-	V
Emitter - Base Breakdown Voltage (I _E =-10uA, I _C =0)	V _{(BR)EB0}	-5.0	-	-	V
Emitter-Base Cutoff Current (V _{EB} =-4V)	I _{EBO}	-	-	-100	nA
Collector-Base Cutoff Current (V _{CB} =-30V, I _E =0)	I _{CBO}	-	-	-100	nA
Collector Cutoff Current (V _{CE} =-45V, V _{BE} =0)	I _{CES}	-	-	-100	nA
DC Current Gain (I _C =-100mA, V _{CE} =-1V)	BC337-16	100	-	250	-
	BC337-25	160	-	400	
	BC337-40	250	-	630	
	(I _C =-300mA, V _{CE} =-1V)	40	-	-	
Collector - Emitter Saturation Voltage (I _C =-500mA, I _B =-50mA)	V _{CE(SAT)}	-	-	-0.7	V
Base - Emitter Voltage (I _C =-300mA, V _{CE} =-1.0V)	V _{BE(ON)}	-	-	-1.2	V
Collector - Base Capacitance (V _{CB} =-10V, I _E =0, f=1MHz)	C _{CBO}	-	5.0	-	pF
Current Gain - Bandwidth Product (I _C =-10mA, V _{CE} =-5V, f=100MHz)	f _T	-	210	-	MHz

ELECTRICAL CHARACTERISTICS CURVES

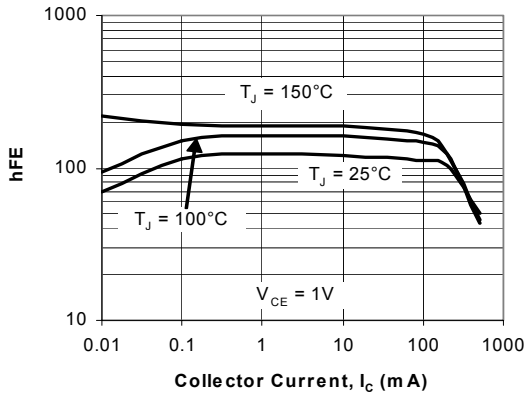


Fig. 1. BC337-16 Typical h_{FE} vs. I_C

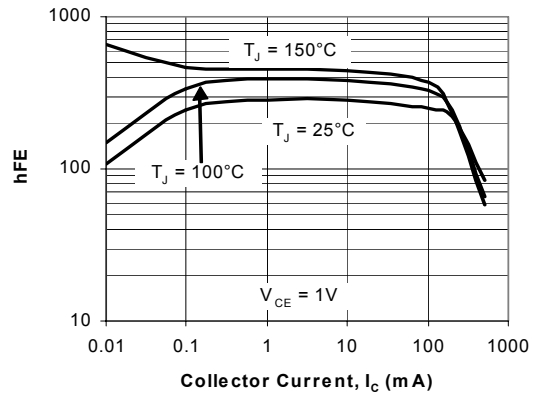


Fig. 2. BC337-25 Typical h_{FE} vs. I_C

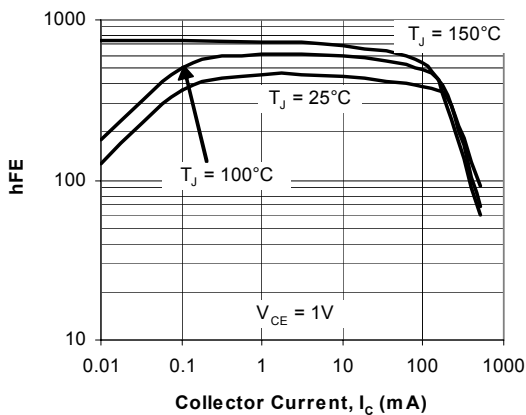


Fig. 3. BC337-40 Typical h_{FE} vs. I_C

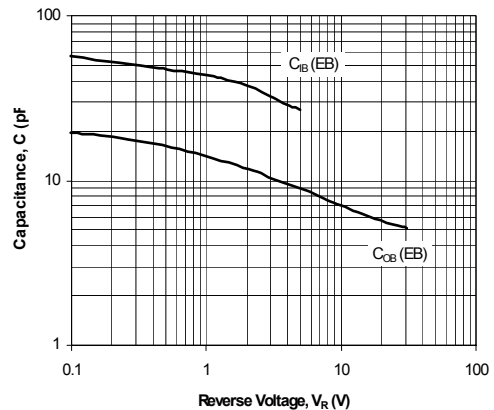
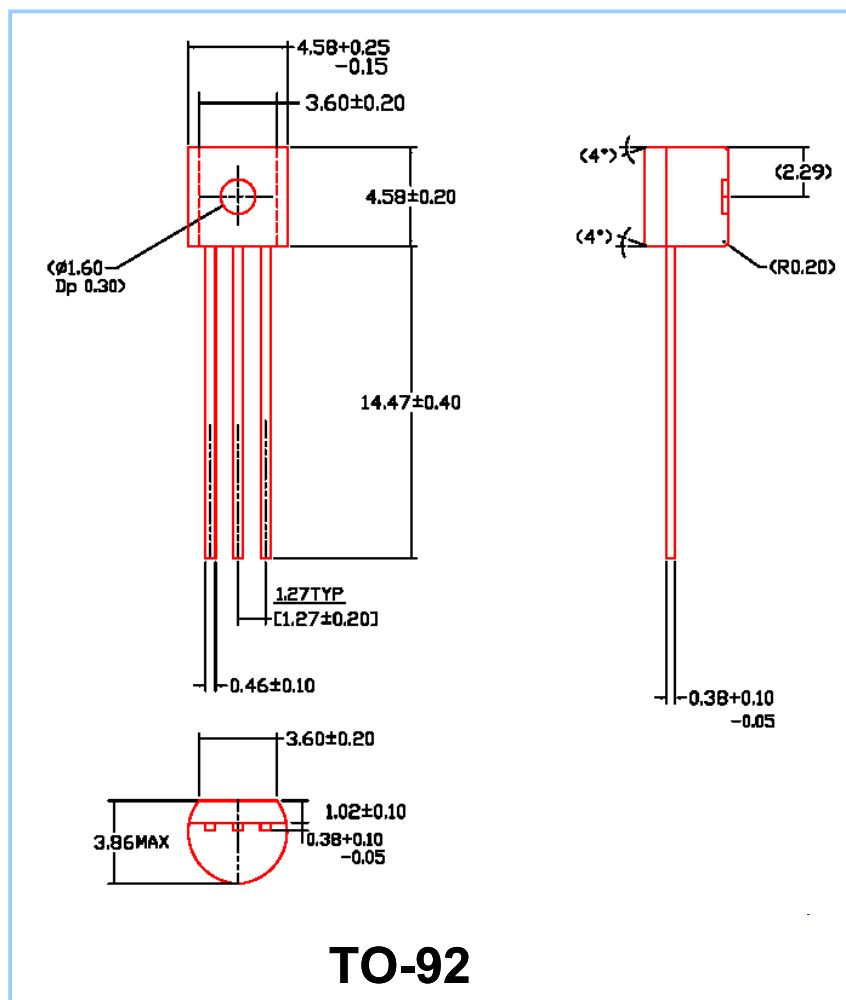


Fig. 4. Typical Capacitances

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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