



**BC237A
 BC237B
 BC237C**

Features

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

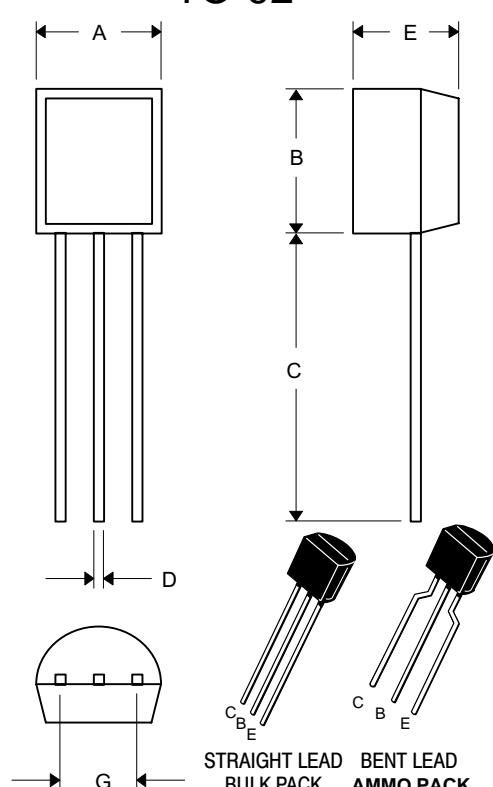
- Operating temperature : -55°C to +150°C
- Storage temperature : -55°C to +150°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Value	Unit
V _{CEO}	Collector-Emitter Voltage	45	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current -Continuous	0.1	A
P _C	Collector Power Dissipation	350	mW
R _{θJA}	Thermal Resistance, Junction to Ambient	357	°C/W
R _{θJC}	Thermal Resistance, Junction to Case	125	°C/W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C

**NPN
 Plastic-Encapsulate
 Transistors**

TO-92



The diagram shows three views of a TO-92 transistor: a top view with dimensions A and D, a side view with dimensions B, C, and E, and a perspective view of the device. Below the diagrams are two examples of the transistor: one with straight leads labeled 'STRAIGHT LEAD BULK PACK' and one with bent leads labeled 'BENT LEAD AMMO PACK'. The bent leads are labeled C, B, and E.

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.175	.185	4.45	4.70	
B	.175	.185	4.45	4.70	
C	.500	---	12.70	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	Straight Lead
	.173	.220	4.40	5.60	Bent Lead

* For ammo packing detailed specification, click here to visit our website of product packaging for details.

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100μA, I _E =0	50			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =2mA, I _B =0	45			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA, I _C =0	6			V
Collector cut-off current	I _{CBO}	V _{CE} =50V, V _{BE} =0			15	nA
DC current gain	h _{FE(1)}	V _{CE} =5V, I _C =10μA		90		
		BC237A		150		
		BC237B BC237C		270		
DC current gain	h _{FE(2)}	V _{CE} =5V, I _C =2mA	120		800	
		BC237A	120		220	
		BC237B BC237C	200 380		460 800	
DC current gain	h _{FE(3)}	V _{CE} =5V, I _C =100mA		120		
		BC237A		180		
		BC237B BC237C		300		
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =10mA, I _B =0.5mA I _C =100mA, I _B =5mA			0.2 0.6	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =10mA, I _B =0.5mA I _C =100mA, I _B =5mA			0.83 1.05	V
Base-emitter voltage	V _{BE}	V _{CE} =5V, I _C =0.1mA V _{CE} =5V, I _C =2mA V _{CE} =5V, I _C =100mA	0.55	0.5 0.83	0.7	V
Transition frequency	f _T	V _{CE} =3V, I _C =0.5mA, f=100MHz V _{CE} =5V, I _C =10mA, f=100MHz	150	100 200		MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz			4.5	pF
Emitter-base capacitance	C _{ib}	V _{EB} =0.5V, I _C =0, f=1MHz		8		Pf
Noise figure	NF	V _{CE} =5V, I _C =0.2mA, f=1kHz, R _s =2KΩ, Δf=200Hz		2	10	dB



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Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 20Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-AP-HF

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