Micro Commercial Components
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BC237A
BC237B
BC237C

NPN
Plastic-Encapsulate Transistors

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
- Moisure Sensitivity Level 1

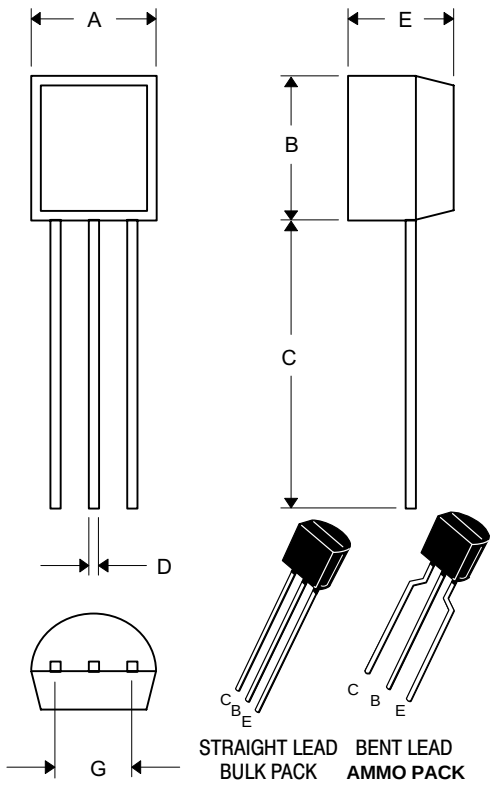
Maximum Ratings

- Operating temperature : -55℃ to +150℃
- Storage temperature : -55℃ to +150℃

Electrical Characteristics @ 25℃ 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
RθJA	Thermal Resistance, Junction to Ambient	357	℃/W
RθJC	Thermal Resistance, Junction to Case	125	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

TO-92



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
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℃ 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 BC237A BC237B BC237C		90 150 270		
	$h_{FE(2)}$	V_{CE}=5V, I_C=2mA BC237A BC237B BC237C	120 120 200 380		800 220 460 800	
	$h_{FE(3)}$	V_{CE}=5V, I_C=100mA BC237A BC237B BC237C		120 180 300		
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, Rs=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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