

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311 Phone: (818) 701-4933 Fax: (818) 701-4939

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

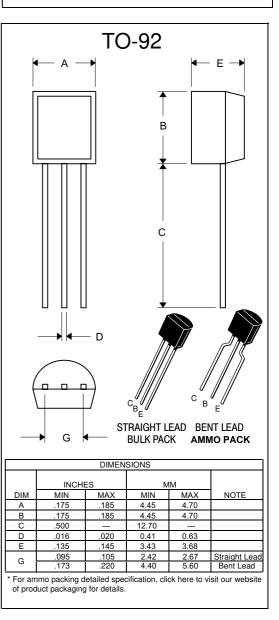
- Operating temperature : -55°C to +150°C
- Storage temperature : -55°C to +150°C

Electrical Characteristics @ 25 $^\circ\!\mathrm{C}$ Unless Otherwise Specified

Symbol	Parameter	Value	Unit		
V _{CEO}	Collector-Emitter Voltage	45	V		
V _{EBO}	Emitter-Base Voltage	6	6 V		
lc	Collector Current -Continuous	0.1 A			
Pc	Collector Power Dissipation	350 mW			
RθJA	Thermal Resistance, Junction to Ambient	357	°C/W		
RØJC	Thermal Resistance, Junction to Case	125 °C/W			
Tj	Junction Temperature	150	150 °C		
T _{stg}	Storage Temperature	-55-150	°C		

BC237A BC237B BC237C

NPN Plastic-Encapsulate Transistors



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Parameter	Symbol	Test conditions	Min	Тур	Мах	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 =100μΑ, I _C =0	6			V
Collector cut-off current	I _{CBO}	V _{CE} =50V, V _{BE} =0			15	nA
	h _{FE(1)}	V _{CE} =5V, I _C =10μA BC237A BC237B BC237C		90 150 270		
DC current gain	h _{FE(2)}	V _{CE} =5V, I _C =2mA BC237A BC237B BC237C	200		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⊤	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

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

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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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