



Micro Commercial Components



Micro Commercial Components  
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**BC337-16/25/40**  
**BC338-16/25/40**

## Features

- Halogen free available upon request by adding suffix "-HF"
- Capable of 0.625Watts of Power Dissipation.
- Collector-current 0.8A
- Collector-base Voltage :  $V_{CBO}=50V(BC337)$  ,  $V_{CBO}=30V(BC338)$
- 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 :  $-55^{\circ}C$  to  $+150^{\circ}C$
- Storage temperature :  $-55^{\circ}C$  to  $+150^{\circ}C$

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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#### OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C=10mA$ , $I_B=0$ )	---	---	Vdc
	BC337	45		
	BC338	25		
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=100\mu A$ , $I_E=0$ )	---	---	Vdc
	BC337	50		
	BC338	30		
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage ( $I_E=10\mu A$ , $I_C=0$ )	5.0	---	Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=45Vdc$ , $I_E=0$ )	---	0.1	$\mu A$
	( $V_{CB}=25Vdc$ , $I_E=0$ )	BC337	---	0.1
	BC338	---	0.1	
$I_{CEO}$	Collector Cutoff Current ( $V_{CE}=40Vdc$ , $I_B=0$ )	---	0.2	$\mu A$
	( $V_{CE}=20Vdc$ , $I_B=0$ )	BC337	---	0.2
	BC338	---	0.2	
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=4.0Vdc$ , $I_C=0$ )	---	0.1	$\mu A$
			---	0.1

#### ON CHARACTERISTICS

$h_{FE(1)}$	DC Current Gain ( $I_C=300mA$ , $V_{CE}=1.0Vdc$ )	60	---	--
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=500mA$ , $I_B=50mA$ )	---	0.7	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ( $I_C=500mA$ , $I_B=50mA$ )	---	1.2	Vdc

#### SMALL SIGNAL CHARACTERISTICS

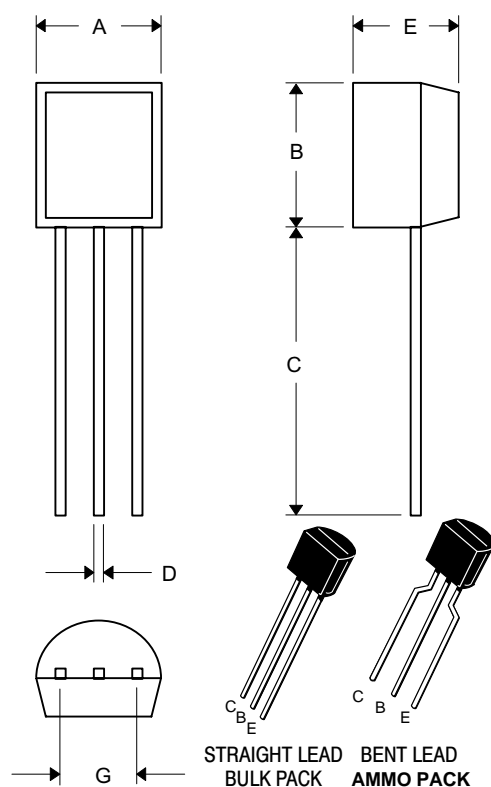
$f_T$	Current-Gain-Bandwidth Product ( $V_{CE}=5.0V$ , $f=100MHz$ , $I_C=10mA$ )	210	---	MHz
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#### hFE CLASSIFICATION

Classification	16	25	40
$h_{FE(2)}$ ( $I_C=100mA$ , $V_{CE}=1.0Vdc$ )	100~250	160~400	250~630
Marking Code	A 011	B 011	C 011

## NPN Plastic-Encapsulate Transistors

### TO-92



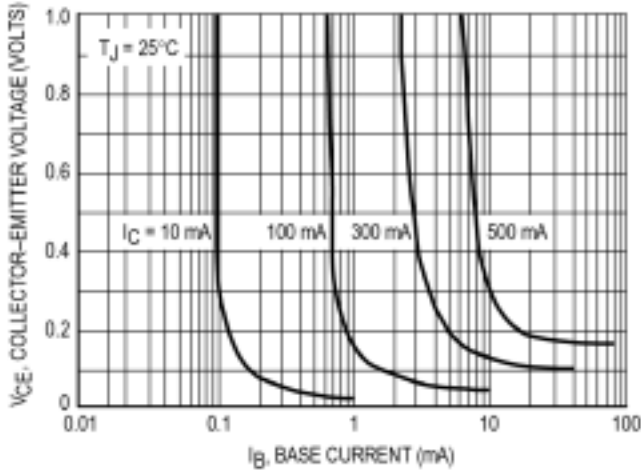
#### DIMENSIONS

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

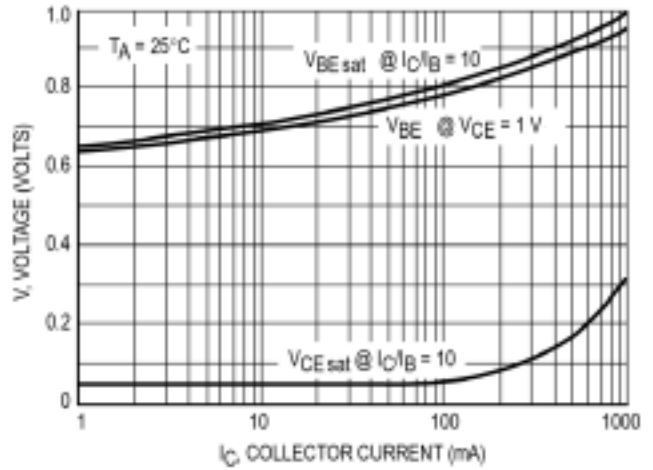
\* For ammo packing detailed specification, click here to visit our website of product packaging for details.

**Typical Characteristics**

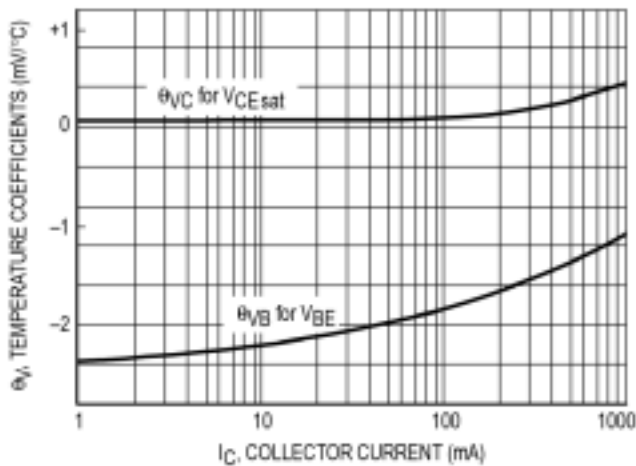
**BC337**



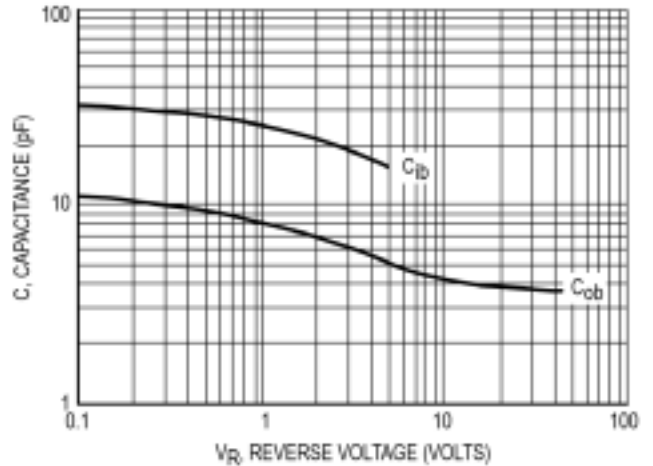
**Saturation Region**



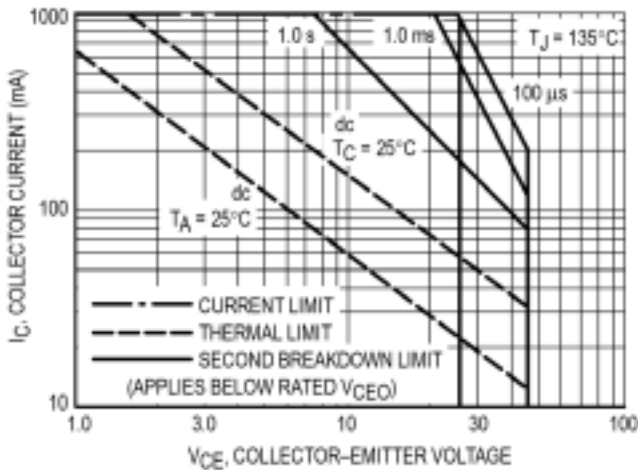
**"On" Voltages**



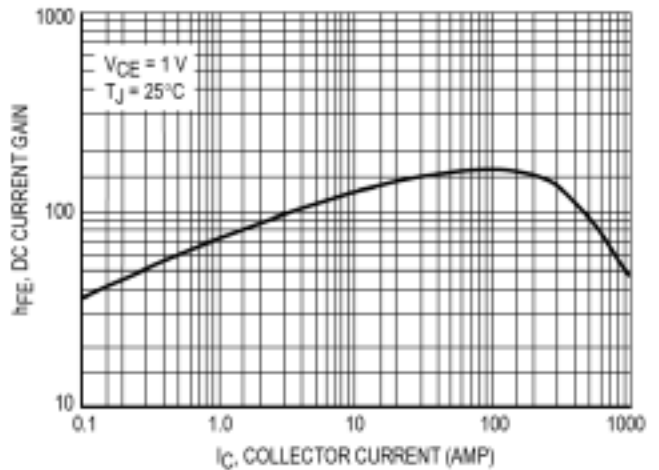
**Temperature Coefficients**



**Capacitances**



**Active Region — Safe Operating Area**



**DC Current Gain**



TM

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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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- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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