



Micro Commercial Components



Micro Commercial Components  
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**BC636-10**  
**BC636-16**  
**BC638**  
**BC640**

## Features

- Through Hole Package
- Capable of 830mWatts of Power Dissipation
- 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

Symbol	Rating	Value	Unit
$V_{CEO}$	Collector-Emitter Voltage	BC636 -45	V
		BC638 -60	V
		BC640 -100	V
$V_{CBO}$	Collector-Base Voltage	BC636 -45	V
		BC638 -60	V
		BC640 -80	V
$V_{EBO}$	Emitter-Base Voltage	-5.0	V
$I_C$	Collector Current	-1.0	A
$I_B$	Base Current	-100	mA
$T_J$	Junction Temperature	-65 to +150	°C
$T_{STG}$	Storage Temperature	-65 to +150	°C

## Electrical Characteristics @ 25°C Unless Otherwise Specified

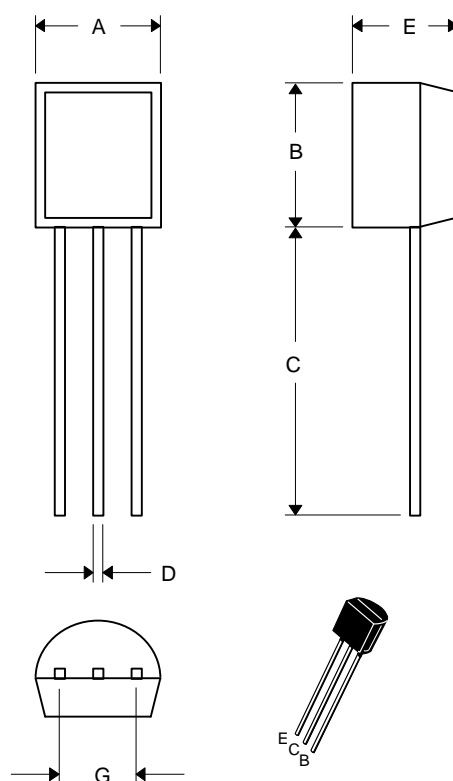
Symbol	Parameter	Min	Typ	Max	Unit
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### OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C=-1mA$ , $I_B=0$ )	BC636 -45	---	---	Vdc
		BC638 -60			Vdc
		BC640 -80			Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=-30V$ , $I_E=0$ )	---	---	-0.1	$\mu A$
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=-5.0V$ , $I_C=0$ )	---	---	-0.1	$\mu A$
$h_{FE(1)}$	DC Current Gain ( $V_{CE}=2V$ , $I_C=5mA$ )	40	---	---	
$h_{FE(2)}$	DC Current Gain ( $V_{CE}=2V$ , $I_C=150mA$ )	BC636-10 63		160	
		BC636-16, BC638, BC640 100		250	
$h_{FE(3)}$	DC Current Gain ( $V_{CE}=2V$ , $I_C=500mA$ )	25			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=500mA$ , $I_B=50mA$ )	---	---	-0.5	Vdc
$V_{BE(on)}$	Base-Emitter Voltage ( $I_C=500mA$ , $V_{CE}=2V$ )	---	---	-1.0	Vdc
$f_T$	Transition Frequency ( $V_{CE}=5.0V$ , $I_C=50mA$ , $f=100MHz$ )	100	---	---	MHz

## PNP Epitaxial Silicon Transistors

### TO-92



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.170	.190	4.33	4.83	
B	.170	.190	4.30	4.83	
C	.550	.590	13.97	14.97	
D	.010	.020	0.36	0.56	
E	.130	.160	3.30	3.96	
G	.010	.104	2.44	2.64	

## Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 2Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

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