

## Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

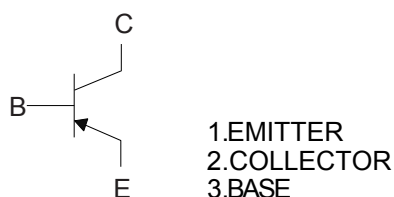
## Maximum Ratings @ 25°C Unless Otherwise Specified

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 150°C/W Junction to Ambient

Parameter		Symbol	Rating	Unit
Collector-Base Voltage	BF421	$V_{CBO}$	-300	V
	BF423		-250	
Collector-Emitter Voltage	BF421	$V_{CEO}$	-300	V
	BF423		-250	
Emitter-Base Voltage		$V_{EBO}$	-5	V
Continuous Collector Current		$I_C$	-0.1	A
Power Dissipation		$P_D$	830	mW

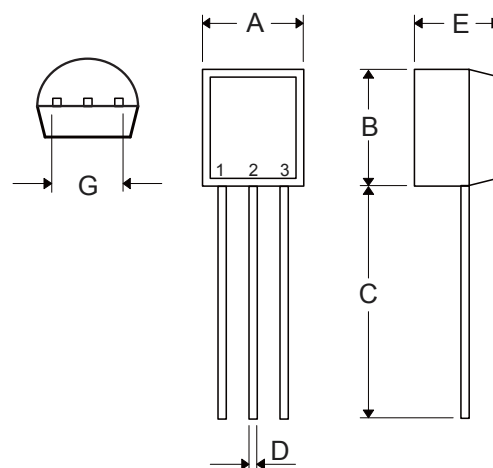
**Marking:** Type Number

## Internal Structure



# PNP Silicon Plastic-Encapsulate Transistor

TO-92



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.169	0.185	4.30	4.70	
B	0.169	0.185	4.30	4.70	
C	0.500	-----	12.70	-----	
D	0.015	0.022	0.38	0.55	
E	0.130	0.146	3.30	3.70	
G	0.095	0.105	2.42	2.67	Straight Lead
	0.173	0.220	4.40	5.60	Bent

**Electrical Characteristics @  $T_A=25^{\circ}\text{C}$  Unless Otherwise Specified**

Parameter		Symbol	Min	Typ	Max	Units	Conditions
Collector-Base Breakdown Voltage	BF421	$V_{(BR)CBO}$	-300			V	$I_C=-100\mu\text{A}$ , $I_E=0$
	BF423		-250				
Collector-Emitter Breakdown Voltage	BF421	$V_{(BR)CEO}$	-300			V	$I_C=-1\text{mA}$ , $I_B=0$
	BF423		-250				
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	-5			V	$I_E=-100\mu\text{A}$ , $I_C=0$
Collector Cutoff Current		$I_{CBO}$			-0.01	$\mu\text{A}$	$V_{CB}=-200\text{V}$ , $I_E=0$
Emitter Cutoff Current		$I_{EBO}$			-0.05	$\mu\text{A}$	$V_{EB}=-5\text{V}$ , $I_C=0$
DC Current Gain		$h_{FE}$	50				$V_{CE}=-20\text{V}$ , $I_C=-25\text{mA}$
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$			-0.6	V	$I_C=-30\text{mA}$ , $I_B=-5\text{mA}$
Transition Frequency		$f_T$	60			MHz	$V_{CE}=-10\text{V}$ , $I_C=-10\text{mA}$ , $f=100\text{MHz}$

## 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-TP-HF

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