

**Micro Commercial Components** 



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## Features

- Halogen free available upon request by adding suffix "-HF"
- Low Collector Saturation Voltage: V<sub>CE(sat)</sub>=0.25V(Max.)
- Low Output Capacitance: Cob=2.0pF(Typ.)
- Complementary Pair With 2SA1980
- Marking : C5343
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Lead Free Finish/ŘoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

## **Maximum Ratings**

Symbol	Rating	Rating	Unit
V <sub>CEO</sub>	Collector-Emitter Voltage	50	V
V <sub>CBO</sub>	Collector-Base Voltage	60	V
V <sub>EBO</sub>	Emitter-Base Voltage	5.0	V
I <sub>C</sub>	Collector Current	150	mA
Pc	Collector power dissipation	625	mW
TJ	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-55 to +150	°C

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min		Max	Units	
<b>OFF CHARA</b>	OFF CHARACTERISTICS					
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage (I <sub>C</sub> =100uAdc, I <sub>B</sub> =0)	60			Vdc	
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage (I <sub>C</sub> =10mAdc, I <sub>B</sub> =0)	50			Vdc	
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage (I <sub>E</sub> =10uAdc, I <sub>C</sub> =0)	5.0			Vdc	
I <sub>CBO</sub>	Collector-Base Cutoff Current (V <sub>CB</sub> =60Vdc,I <sub>E</sub> =0)			0.1	uAdc	
I <sub>EBO</sub>	Emitter-Base Cutoff Current (V <sub>EB</sub> =5.0Vdc, I <sub>C</sub> =0)			0.1	uAdc	

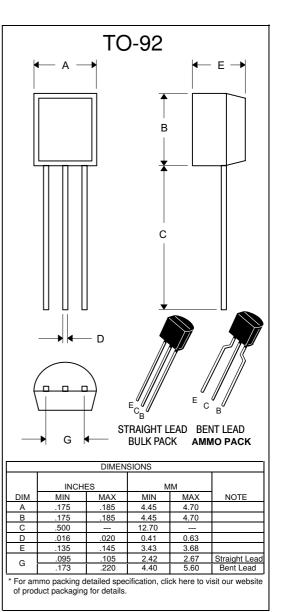
### **ON CHARACTERISTICS**

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h <sub>FE</sub>	Forward Current Transfer ratio* (I <sub>C</sub> =2.0Adc, V <sub>CE</sub> =6.0Vdc)	70		700	
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage (I <sub>c</sub> =100mAdc, I <sub>B</sub> =10mAdc)			0.25	Vdc
f⊤	Transition Frequency (V <sub>CE</sub> =10Vdc, I <sub>C</sub> =1.0mAdc)	80			MHz
C <sub>ob</sub>	Collector Output Capacitance (V <sub>CB</sub> =10Vdc, I <sub>E</sub> =0, f=1.0MHz)		2.0	3.5	pF
NF	Noise Figure (V <sub>CE</sub> =6.0Vdc, I <sub>C</sub> =0.1mAdc, f=1.0KHz, Rg=10KΩ)			10	dB

\* h<sub>FE</sub> rank / O: 70-140, Y:120-240, G:200-400, L:300-700



# NPN Silicon Transistors



www.mccsemi.com

**Revision:** D



## **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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**Revision:** D