



**Micro Commercial Components** 

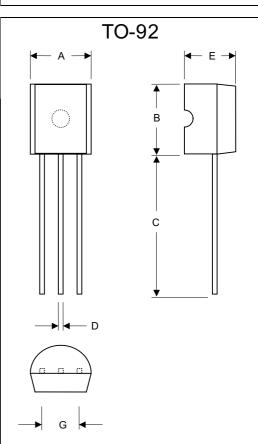
Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 S8050-B S8050-C S8050-D

# **Features**

- TO-92 Plastic-Encapsulate Transistors
- Capable of 0.625Watts(Tamb=25°C) of Power Dissipation.
- Collector-current 0.5A
- Collector-base Voltage 40V
- Operating and storage junction temperature range: -55°C to +150°C
- Marking: S8050
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

# NPN Silicon Transistors



DIVIENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.170	.190	4.33	4.83	
В	.170	.190	4.30	4.83	
С	.550	.590	13.97	14.97	
D	.010	.020	0.36	0.56	
Е	.130	.160	3.30	3.96	
G	.096	.104	2.44	2.64	
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# Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units	
OFF CHARAC	OFF CHARACTERISTICS				
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage (b=100uAdc, l∈=0)	40		Vdc	
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage (b=0.1mAdc, b=0)	25	-	Vdc	
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( <sub>E</sub> =100uAdc, <sub>Ic</sub> =0)	5.0	-	Vdc	
Сво	Collector Cutoff Current (V <sub>CB</sub> =40Vdc, ½=0)		0.1	uAdc	
PEO	Collector Cutoff Current (V <sub>CE</sub> =20Vdc, <sub>b</sub> =0)		0.1	uAdc	
l <sub>EBO</sub>	Emitter Cutoff Current (V <sub>EB</sub> =3.0Vdc,		0.1	uAdc	

## **ON CHARACTERISTICS**

h <sub>FE(1)</sub>	DC Current Gain	85	300	
	(b=50mAdc, V <sub>CE</sub> =1.0Vdc)			
h <sub>FE(2)</sub>	DC Current Gain	50		
	(b=500mAdc, V <sub>CE</sub> =1.0Vdc)			
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage		0.6	Vdc
	(b=500mAdc, b=50mAdc)			
$V_{BE(sat)}$	Base-Emitter Saturation Voltage		1.2	Vdc
	(l <sub>c</sub> =500mAdc, l <sub>B</sub> =50mAdc)			
$V_{EB}$	Base- Emitter Voltage		1.4	Vdc
	(I <sub>E</sub> =100mAdc)			

#### **SMALL-SIGNAL CHARACTERISTICS**

f <sub>T</sub>	Transistor Frequency	150		MHz
	( $\xi$ =20mAdc, $V_{CE}$ =6.0Vdc, f=30MHz)			

# **CLASSIFICATION OF H**

Rank	В	С	D
Range	85-150	120-200	160-300



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## Ordering Information:

Device	Packing
Part Number-AP	Ammo Packing: 20Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

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