



Micro Commercial Components



Micro Commercial Components  
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# 2SB1694

## Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
  - High DC Current Gain
  - High Collector Current
  - Low Collector-emitter Saturation Voltage
  - Epoxy meets UL 94 V-0 flammability rating
  - Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

## PNP General Purpose Transistors

### Maximum Ratings @ T<sub>a</sub> = 25°C (unless otherwise noted)

Symbol	Parameter	Value	Unit
I <sub>c</sub>	Collector Current	-1.0	A
P <sub>D</sub>	Total Device Dissipation	0.2	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature Range	-55 to +150	°C

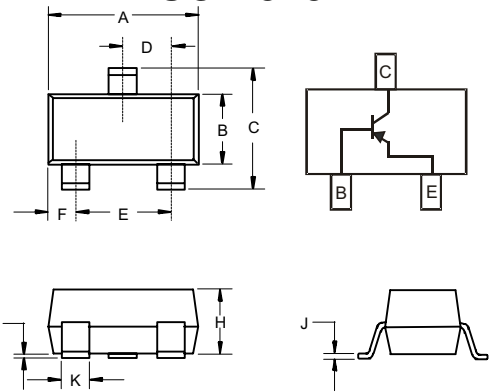
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Unit
<b>OFF CHARACTERISTICS</b>				
V <sub>(BR)CEO</sub>	Collector-Emmitter Breakdown Voltage (I <sub>c</sub> =-1mA, I <sub>E</sub> =0)	-30		V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage (I <sub>c</sub> =-10μA, I <sub>E</sub> =0)	-30		V
V <sub>(BR)EBO</sub>	Collector-Base Breakdown Voltage (I <sub>E</sub> =-10μA, I <sub>C</sub> =0)	-6.0		V
I <sub>CBO</sub>	Collector-Base Cutoff Current (V <sub>CB</sub> =-30Vdc, I <sub>E</sub> =0)		-0.1	μA
I <sub>EBO</sub>	Emitter-Base Cutoff Current (V <sub>EB</sub> =-5.0Vdc, I <sub>C</sub> =0)		-0.1	μA

### ON CHARACTERISTICS

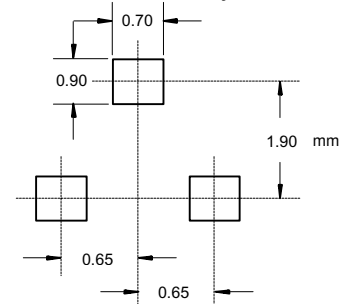
h <sub>FE</sub>	DC Current Gain (I <sub>C</sub> =-100mA, V <sub>CE</sub> =-2.0Vdc)	270	680	
V <sub>CE(sat)</sub>	Collector-Emmitter Saturation Voltage (I <sub>C</sub> =-500mA, I <sub>B</sub> =-25mA)		-0.38	Vdc
f <sub>T</sub>	Transition Frequency (V <sub>CE</sub> =-2Vdc, I <sub>C</sub> =-100mA, f=100MHZ)		320(typ)	MHZ
C <sub>ob</sub>	Collector Output Capacitance (V <sub>CB</sub> =-10Vdc, I <sub>E</sub> =0, f=1MHZ)		7(typ)	PF

### SOT-323



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	

### Suggested Solder Pad Layout





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### Ordering Information :

Device	Packing
Part Number-TP	Tape & Reel; 3 Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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