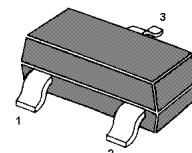


# BF821

## PNP Silicon High Voltage Transistors

for high voltage switching and amplifier applications.



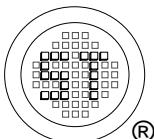
1. Base 2. Emitter 3. Collector  
SOT-23 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	300	V
Collector Emitter Voltage	$-V_{CEO}$	300	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	50	mA
Peak Collector Current	$-I_{CM}$	100	mA
Peak Base Current	$-I_{BM}$	50	mA
Total Power Dissipation	$P_{tot}$	350	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE} = 20$ V, $-I_C = 25$ mA	$h_{FE}$	50	-	-
Collector Base Cutoff Current at $-V_{CB} = 200$ V	$-I_{CBO}$	-	10	nA
Emitter Base Cutoff Current at $-V_{EB} = 5$ V	$-I_{EBO}$	-	50	nA
Collector Base Breakdown Voltage at $-I_C = 100 \mu\text{A}$	$-V_{(BR)CBO}$	300	-	V
Collector Emitter Breakdown Voltage at $-I_C = 1$ mA	$-V_{(BR)CEO}$	300	-	V
Emitter Base Breakdown Voltage at $-I_E = 100 \mu\text{A}$	$-V_{(BR)EBO}$	5	-	V
Collector Emitter Saturation Voltage at $-I_C = 30$ mA, $-I_B = 5$ mA	$-V_{CE(sat)}$	-	0.8	V
Current Gain Bandwidth Product at $-V_{CE} = 10$ V, $-I_C = 10$ mA, $f = 100$ MHz	$f_T$	60	-	MHz
Collector Output Capacitance at $-V_{CB} = 20$ V, $f = 1$ MHz	$C_{ob}$	-	6	pF



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