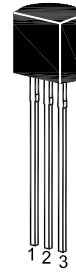


BC368

NPN Silicon Epitaxial Planar Transistor

Applications

- General purpose switching and amplification
- Power applications such as audio output stages



1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	32	V
Collector Emitter Voltage	V_{CEO}	20	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current (DC)	I_C	1	A
Peak Collector Current	I_{CM}	2	A
Total Power Dissipation	P_{tot}	625	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 $V_{CE} = 10\text{ V}$, $I_C = 5\text{ mA}$ at $V_{CE} = 1\text{ V}$, $I_C = 500\text{ mA}$ at $V_{CE} = 1\text{ V}$, $I_C = 1\text{ A}$	h_{FE} h_{FE} h_{FE}	50 85 60	- 375 -	- - -
Collector Base Cutoff Current at $V_{CB} = 25\text{ V}$	I_{CBO}	-	100	nA
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	I_{EBO}	-	100	nA
Collector Base Breakdown Voltage at $I_C = 100\text{ }\mu\text{A}$	$V_{(BR)CBO}$	32	-	V
Collector Emitter Breakdown Voltage at $I_C = 10\text{ mA}$	$V_{(BR)CEO}$	20	-	V
Emitter Base Breakdown Voltage at $I_E = 100\text{ }\mu\text{A}$	$V_{(BR)EBO}$	5	-	V
Collector Emitter Saturation Voltage at $I_C = 1\text{ A}$, $I_B = 100\text{ mA}$	$V_{CE(sat)}$	-	0.5	V
Base Emitter On Voltage at $V_{CE} = 1\text{ V}$, $I_C = 1\text{ A}$	$V_{BE(on)}$	-	1	V
Gain Bandwidth Product at $V_{CE} = 5\text{ V}$, $I_C = 10\text{ mA}$, $f = 20\text{ MHz}$	f_T	40	-	MHz

