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FAIRCHILD
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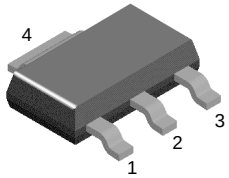
BCP68

NPN General Purpose Amplifier

- This device is designed for general purpose medium power amplifiers.
- Sourced from process 37.



SOT-223

1. Base 2.4. Collector 3. Emitter

Absolute Maximum Ratings T_C=25°C unless otherwise noted

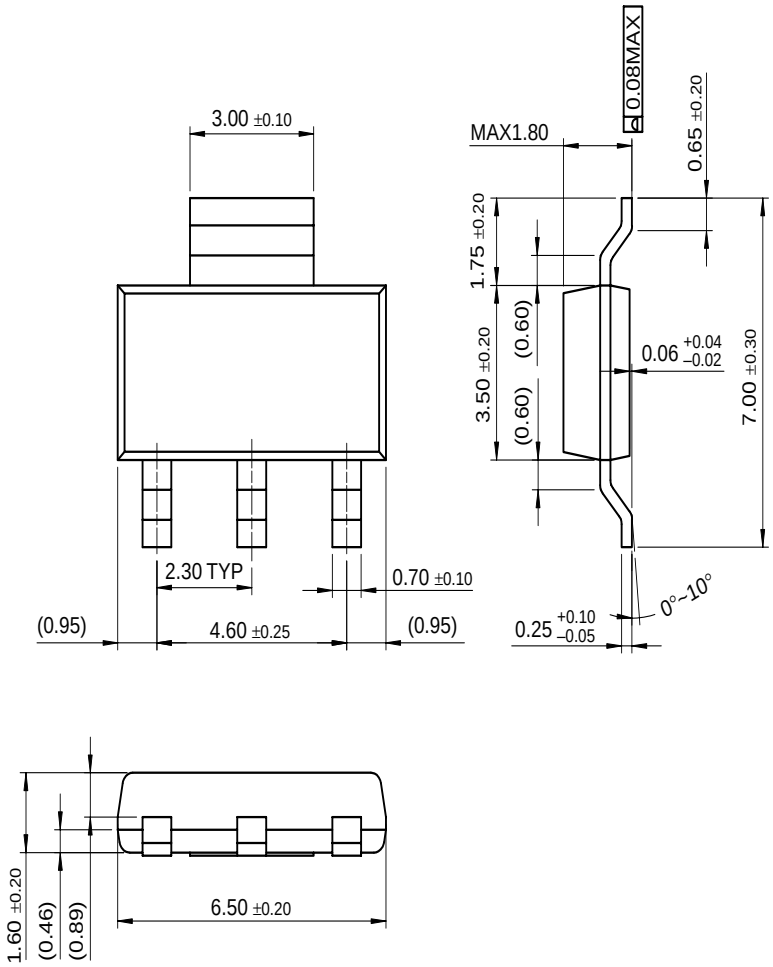
Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage	20	V
V_{CBO}	Collector-Base Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	1	A
P_D	Total Device Dissipation @ T_A=25°C - Derate above 25°C	1.5 12	Watts mW/°C
T_J, T_{STG}	Operating and Storage Junction Temperature Range	- 55 ~ +150	°C

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Units
Off Characteristics						
$V_{(BR)CES}$	Collector-Emitter Breakdown Voltage	I_C = 100μA, I_E = 0	25			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C = 1mA, I_B = 0	20			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E = 10μA, I_C = 0	5			V
I_{CBO}	Collector-Base Cutoff Current	V_{CB} = 25V, I_E = 0, T_A = 25°C V_{CB} = 25V, I_E = 0, T_A = 125°C			10 1	μA mA
I_{EBO}	Emitter-Base Cutoff Current	V_{EB} = 5V, I_C = 0			10	μA
On Characteristics (1)						
h_{FE}	DC Current Gain	I_C = 5mA, V_{CE} = 10V I_C = 500mA, V_{CE} = 1V I_C = 1A, V_{CE} = 1V	50 85 60		 375 	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C = 1A, I_B = 100mA			0.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C = 1A, V_{CE} = 1V			1	V

Package Demensions

SOT-223



Dimensions in Millimeters

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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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