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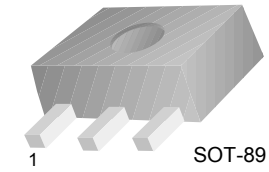
FAIRCHILD SEMICONDUCTOR®

July 2005

FJC1308
PNP Epitaxial Silicon Transistor

Audio Power Amplifier Applications

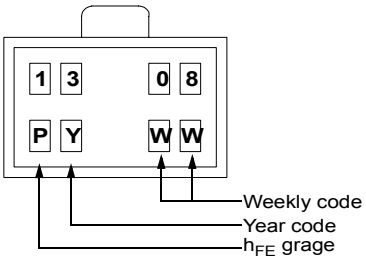
- Complement to FJC1963
- High Collector Current
- Low Collector-Emitter Saturation Voltage



SOT-89

1. Base 2. Collector 3. Emitter

Marking



Absolute Maximum Ratings T_C = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-30	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current (DC)	-3	A
P_C	Power Dissipation(T_C=25°C)	0.5	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 55 ~ 150	°C

Electrical Characteristics T_C = 25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	I_C = -50μA, I_E = 0	-30		V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C = -1mA, I_B = 0	-30		V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = -50μA, I_C = 0	-6		V
I_{CEO}	Collector Cut-off Current	V_{CE} = -20V, V_B = 0		-0.5	μA
I_{EBO}	Emitter Cut-off Current	V_{EB} = -5V, I_C = 0		-0.5	μA
h_{FE}	DC Current Gain	V_{CE} = -2V, I_C= -0.5A	80	390	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C =-1.5, I_B = -0.15A		-0.45	V
V_{BE}(sat)	Base-Emitter Saturation Voltage	I_C = -1.5, I_B = -0.15A		-1.5	V

h_{FE} Classification

Classification	P	Q	R
h_{FE}	80 ~ 180	120 ~ 270	180 ~ 390

Package Marking and Ordering Information

Device Marking	Device	Package	Reel Size	Tape Width	Quantity
1308	FJC1308	SOT-89	13”	--	4,000

Typical Performance Characteristics

Figure 1. Static Characteristic

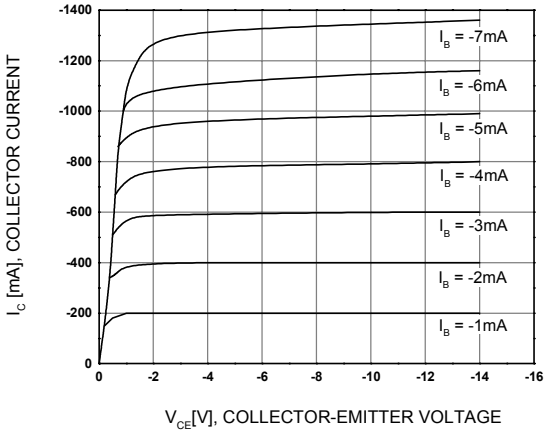


Figure 2. DC Current Gain

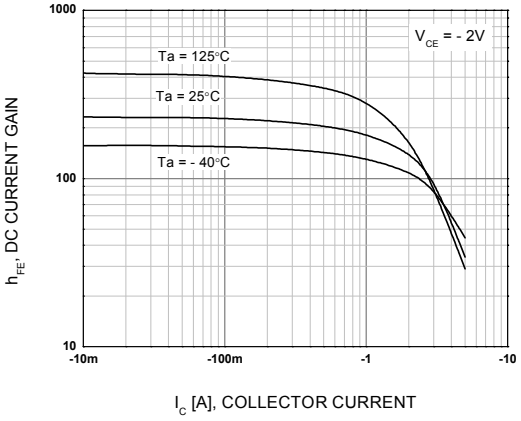


Figure 3. Collector-Emitter Saturation Voltage

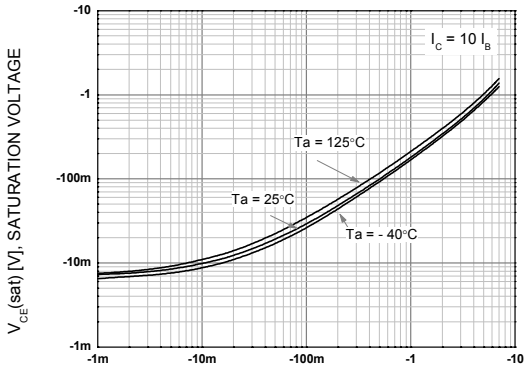


Figure 4. Base-Emitter Saturation Voltage

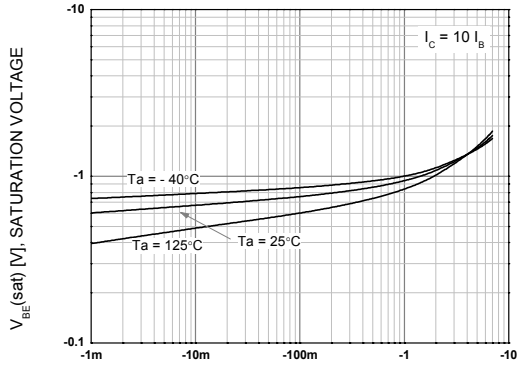


Figure 5. Base-Emitter On Voltage

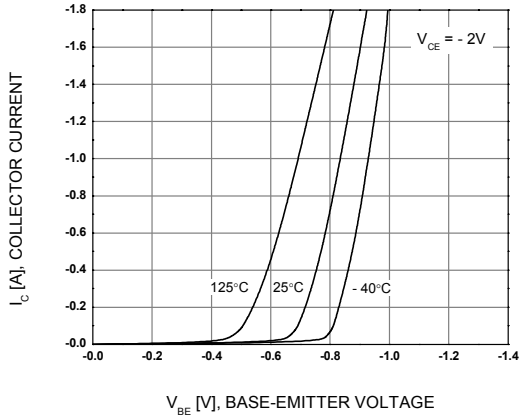
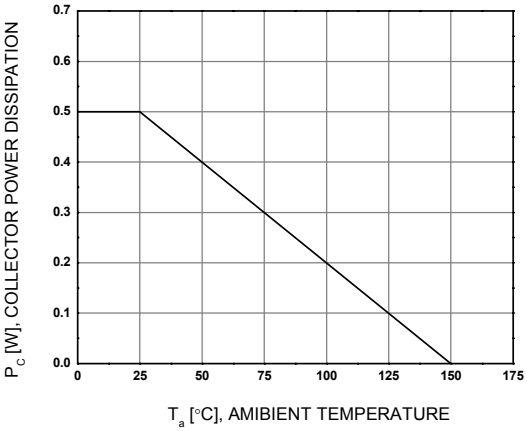
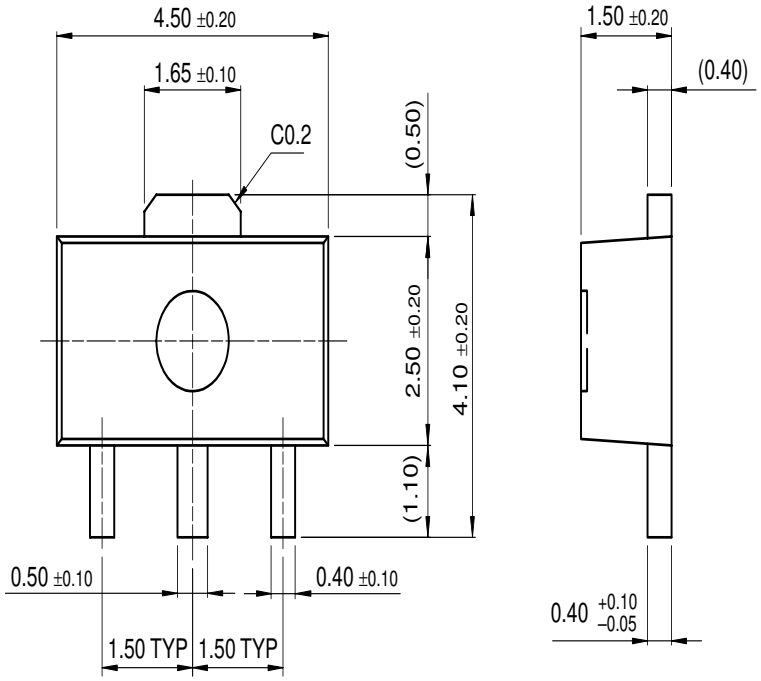


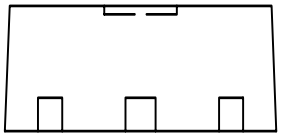
Figure 6. Power Derating



Mechanical Dimensions

SOT-89





Dimensions in Millimeters

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Programmable Active Droop™

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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.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.

Rev. I16