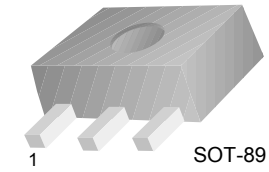
FAIRCHILD SEMICONDUCTOR®

July 2005

FJC1308
PNP Epitaxial Silicon Transistor

Audio Power Amplifier Applications

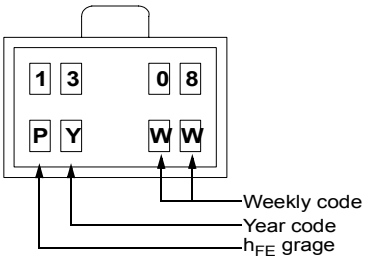
- Complement to FJC1963
- High Collector Current
- Low Collector-Emitter Saturation Voltage



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

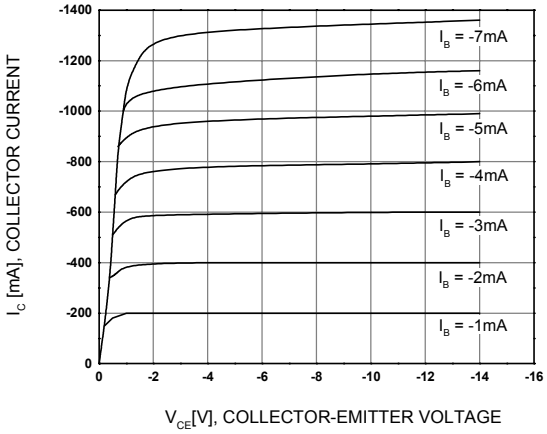


Figure 2. DC Current Gain

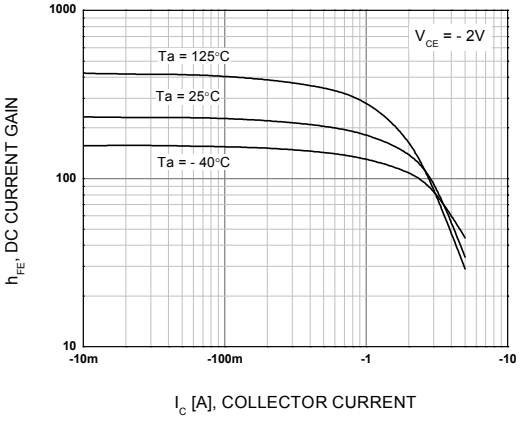


Figure 3. Collector-Emitter Saturation Voltage

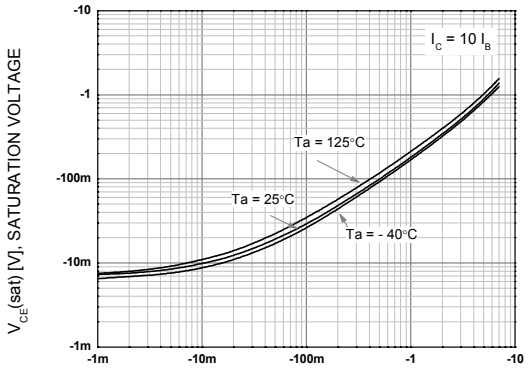


Figure 4. Base-Emitter Saturation Voltage

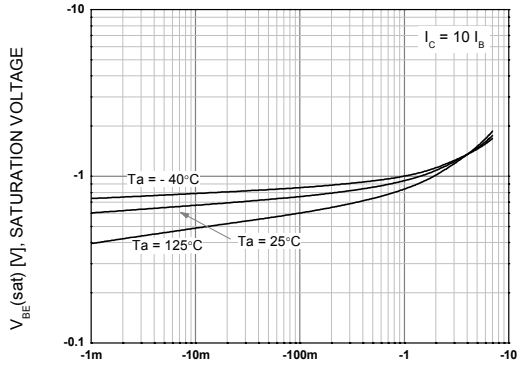


Figure 5. Base-Emitter On Voltage

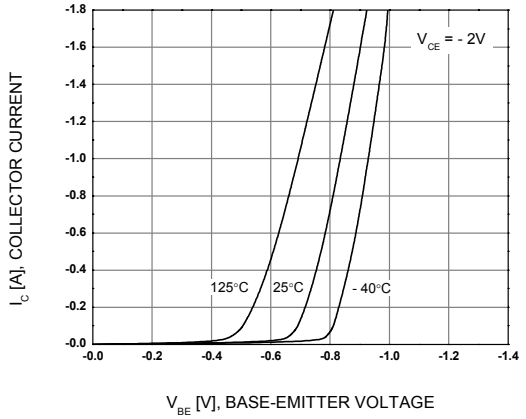
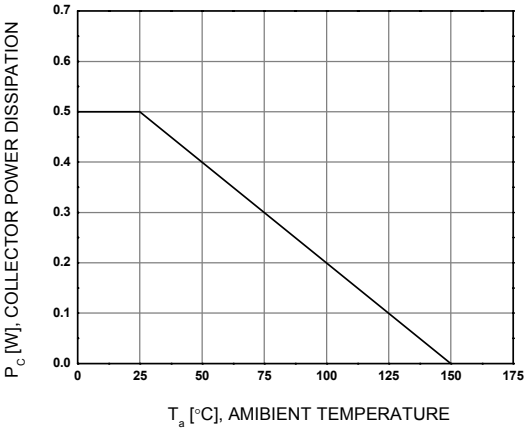
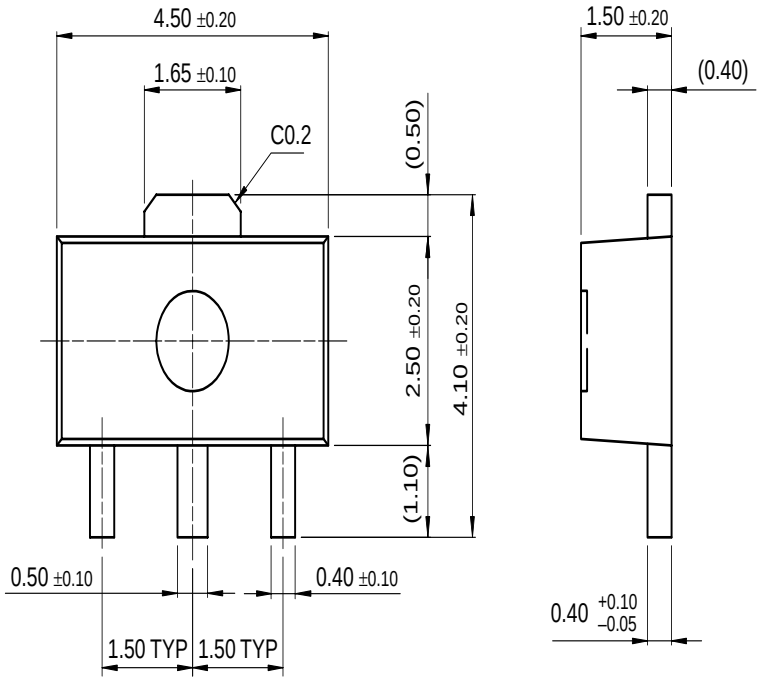


Figure 6. Power Derating



Mechanical Dimensions

SOT-89



Dimensions in Millimeters

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