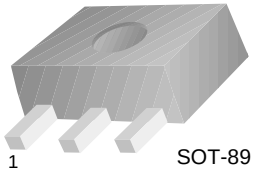
FAIRCHILD
SEMICONDUCTOR®

FJC1308

Audio Power Amplifier Applications

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



SOT-89

1. Base 2. Collector 3. Emitter

PNP Epitaxial Silicon Transistor

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

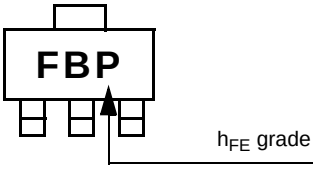
Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	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

Marking



Typical Characteristics

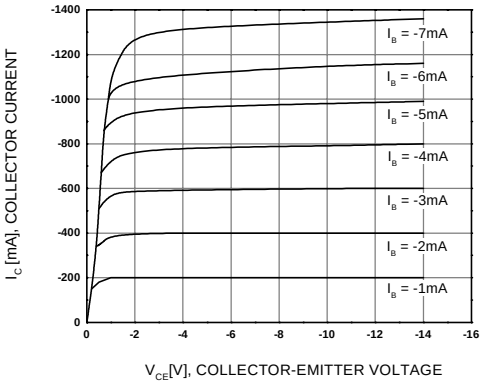


Figure 1. Static Characteristic

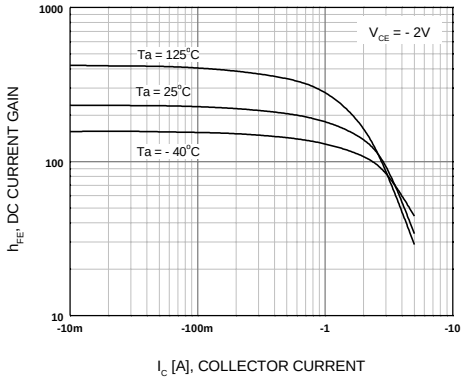


Figure 2. DC current Gain

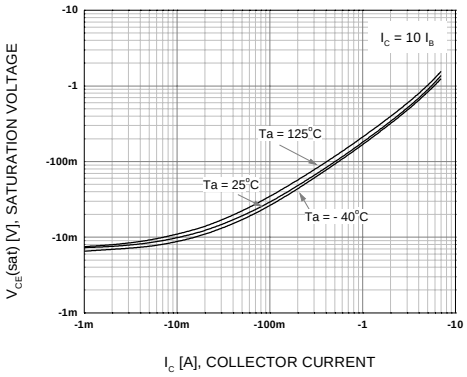


Figure 3. Collector-Emitter Saturation Voltage

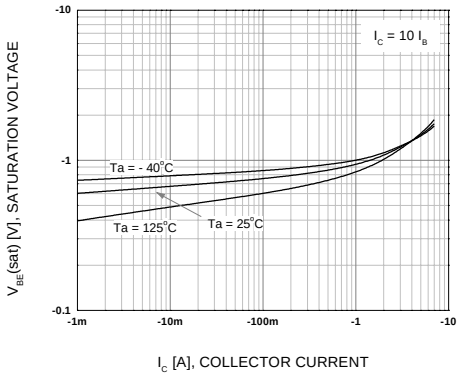


Figure 4. Base-Emitter Saturation Voltage

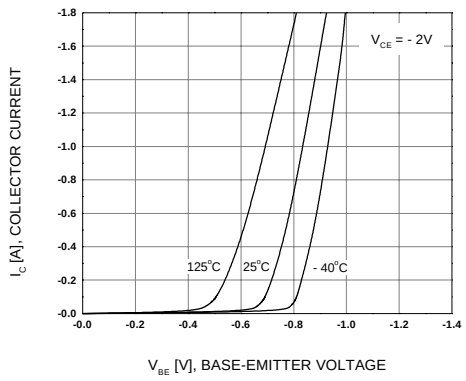


Figure 5. Base-Emitter On Voltage

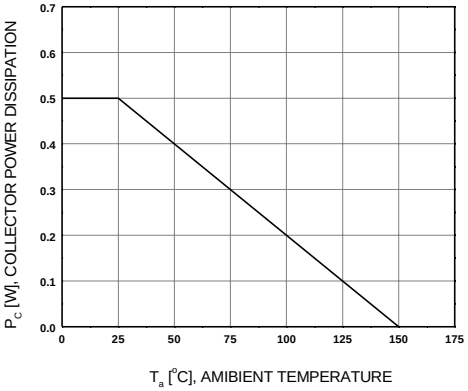
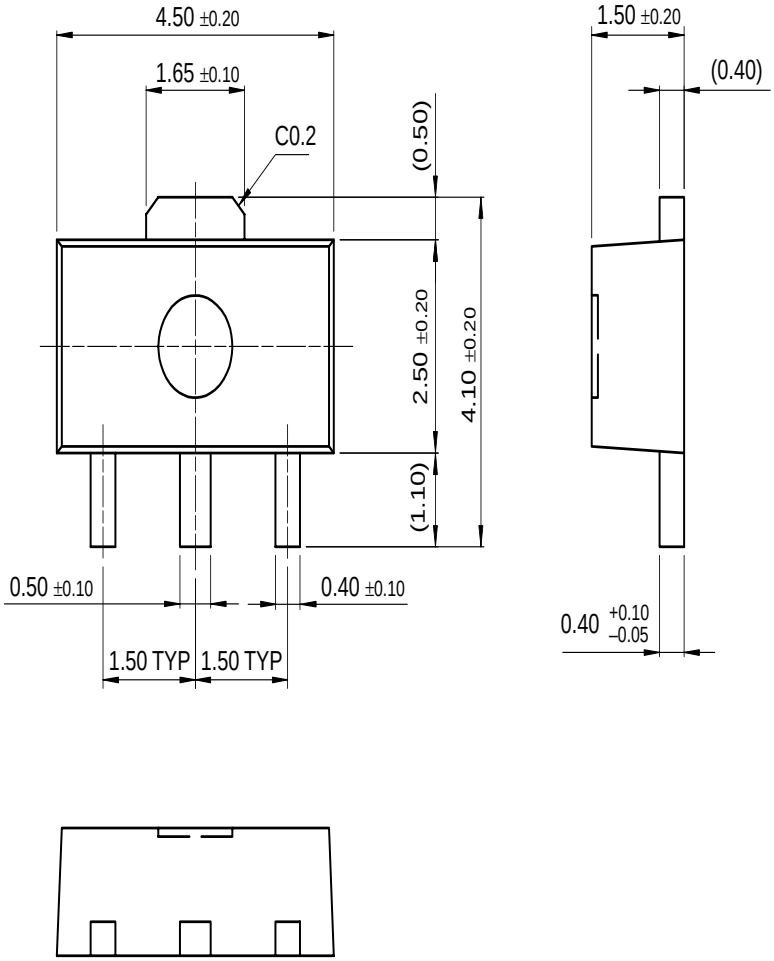


Figure 6. Power Derating

Package Dimensions

SOT-89



Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic™
E^2CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	I^2C™	OCX™	RapidConfigure™	UHC™
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The Power Franchise™		OPTOLOGIC®	SILENT SWITCHER®	VCX™
Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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