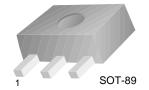


# **FJC1308**

## **Audio Power Amplifier Applications**

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



1. Base 2. Collector 3. Emitter

# **PNP Epitaxial Silicon Transistor**

### Absolute Maximum Ratings $T_C=25^{\circ}C$ unless otherwise noted

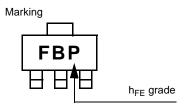
Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	-30	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-30	V
V <sub>EBO</sub>	Emitter-Base Voltage	-6	V
I <sub>C</sub>	Collector Current (DC)	-3	Α
P <sub>C</sub>	Power Dissipation(T <sub>C</sub> =25°C)	0.5	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	- 55 ~ 150	°C

### Electrical Characteristics $T_C=25$ °C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> =-50μA, I <sub>E</sub> =0	-30			V
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	$I_C=-1$ mA, $I_B=0$	-30			V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	$I_{E}$ =-50 $\mu$ A, $I_{C}$ =0	-6			V
I <sub>CEO</sub>	Collector Cut-off Current	$V_{CE}$ =-20V, $V_{B}$ =0			-0.5	μΑ
I <sub>EBO</sub>	Emitter Cut-off Current	$V_{EB}$ =-5V, $I_{C}$ =0			-0.5	μΑ
h <sub>FE</sub>	DC Current Gain	V <sub>CE</sub> =-2V, I <sub>C</sub> =-0.5A	80		390	
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> =-1.5, I <sub>B</sub> =-0.15A			-0.45	V
V <sub>BE</sub> (sat)	Base-Emitter Saturation Voltage	I <sub>C</sub> =-1.5, I <sub>B</sub> =-0.15A			-1.5	V

# **h**<sub>FE</sub> Classification

Classification	Р	Q	R
h <sub>FE</sub>	80 ~ 180	120 ~ 270	180 ~ 390



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# **Typical Characteristics**

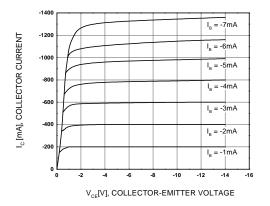


Figure 1. Static Characteristic

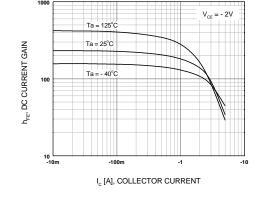


Figure 2. DC current Gain

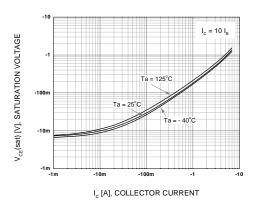


Figure 3. Collector-Emitter Saturation Voltage

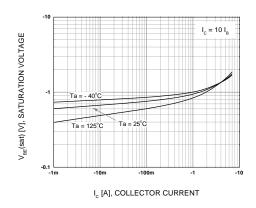


Figure 4. Base-Emitter Saturation Voltage

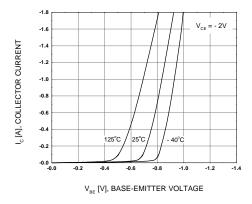


Figure 5. Base-Emitter On Voltage

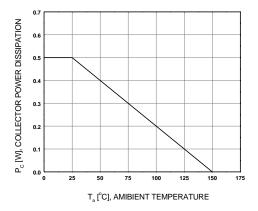
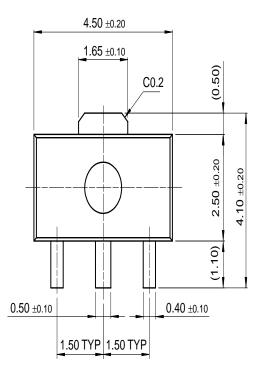
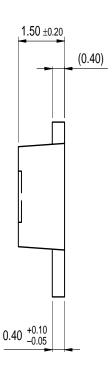


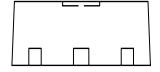
Figure 6. Power Derating

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# **SOT-89**







Dimensions in Millimeters

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Bottomless™	FAST <sup>®</sup>	LittleFET™	Power247™	SuperSOT™-3
CoolFET™	FASTr™	MicroFET™	PowerTrench <sup>®</sup>	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	$QS^{TM}$	SyncFET™
EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic™
E <sup>2</sup> CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	$I^2C^{TM}$	$OCX^{TM}$	RapidConfigure™	UHC™
Across the board.	. Around the world.™	OCXPro™	RapidConnect™	UltraFET <sup>®</sup>
The Power Franchise™		OPTOLOGIC <sup>®</sup>	SILENT SWITCHER®	$VCX^{TM}$
Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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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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