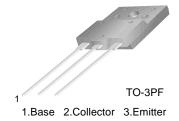


FJAF4210

Audio Power Amplifier

- High Current Capability : I_C= -10A
- High Power Dissipation
- Wide S.O.A
- Complement to FJAF4310



PNP Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	Units
V _{CBO}	Collector-Base Voltage	-200	V
V _{CEO}	Collector-Emitter Voltage	-140	V
V _{EBO}	Emitter-Base Voltage	-6	V
I _C	Collector Current (DC)	-10	Α
IB	Base Current (DC)	-1.5	Α
P _C	Collector Dissipation (T _C =25°C)	80	W
$R_{\theta JC}$	Junction to Case	1.33	°C/W
TJ	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.	Тур.	Max.	Units
BV _{CBO}	Collector-Base Breakdown Voltage	$I_C=-5mA$, $I_E=0$	-200			V
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C =-50mA, R _{BE} =∞	-140			V
BV _{EBO}	Emitter-Base Breakdown Voltage	I_E =-5mA, I_C =0	-6			V
I _{CBO}	Collector Cut-off Current	V _{CB} =-200V, I _E =0			-10	μΑ
I _{EBO}	Emitter Cut-off Current	V _{EB} =-6V, I _C =0			-10	μΑ
h _{FE}	* DC Current Gain	V_{CE} =-4V, I_{C} =-3A	50		180	
V _{CE} (sat)	Collector-Emitter Saturation Voltage	I _C =-5A, I _B =-0.5A			-0.5	V
C _{ob}	Output Capacitance	V _{CB} =-10V, f=1MHz		400		pF
f _T	Current Gain Bandwidth Product	V _{CE} =-5V, I _C =-1A		30		MHz

* Pulse Test : PW=20µs

h_{FE} Classification

Classification	R	0	Y	
h _{FE}	50 ~ 100	70 ~ 140	90 ~ 180	

Typical Characteristics

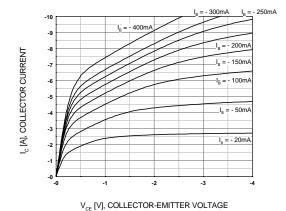


Figure 1. Static Characterstic

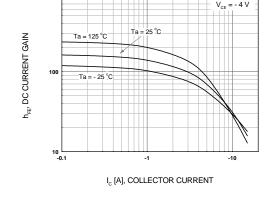


Figure 2. DC current Gain

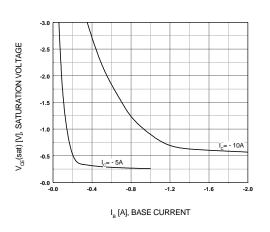


Figure 3. $V_{CE}(sat)$ vs. I_{B} Characteristics

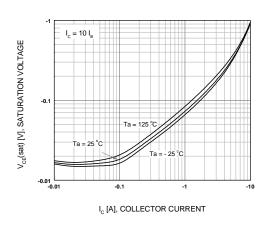


Figure 4. Collector-Emitter Saturation Voltage

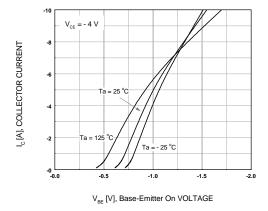


Figure 5. Base-Emitter On Voltage

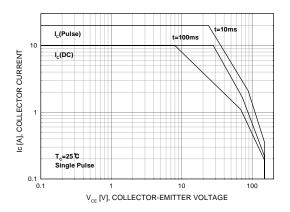


Figure 6. Forward Bias Safe Operating Area

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Typical Characteristics (Continued)

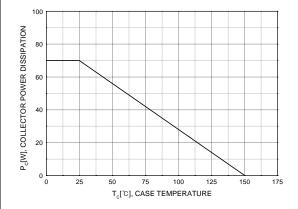
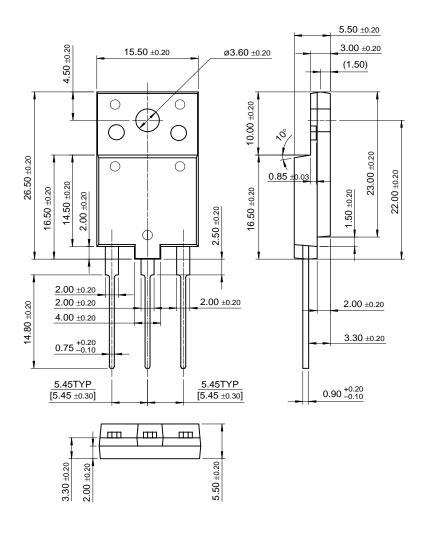


Figure 7. Power Derating

Package Dimensions

TO-3PF



Dimensions in Millimeters

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$CROSSVOLT^{TM}$	FRFET™	MicroPak™	QFET™	SuperSOT™-8
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EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic™
E ² CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	I^2C^{TM}	OCX^{TM}	RapidConfigure™	UHC™
Across the board.	Around the world.™	OCXPro™	RapidConnect™	UltraFET [®]
The Power Franchise™		OPTOLOGIC [®]	SILENT SWITCHER®	VCX TM
Programmable Ad	ctive Droop™	OPTOPLANAR™	SMART START™	

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