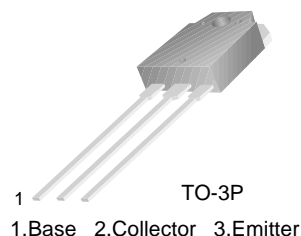


# FJA4213

## Audio Power Amplifier

- High Current Capability  $I_C = -15A$
- High Power Dissipation
- Wide S.O.A
- Complement to FJA4313



## PNP Epitaxial Silicon Transistor

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

Symbol	Parameter	Ratings	Units
$V_{CBO}$	Collector-Base Voltage	-230	V
$V_{CEO}$	Collector-Emitter Voltage	-230	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current	-15	A
$I_B$	Base Current	-1.5	A
$P_C$	Collector Dissipation ( $T_C=25^\circ C$ )	130	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{STG}$	Storage Temperature	- 50 ~ 150	$^\circ C$

**Electrical Characteristics**  $T_C=25^\circ C$  unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$BV_{CBO}$	Collector-Base Breakdown Voltage	$I_C=-5mA, I_E=0$	-230			V
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	$I_C=-10mA, R_{BE}=\infty$	-230			V
$BV_{EBO}$	Emitter-Base Breakdown Voltage	$I_E=-5mA, I_C=0$	-5			V
$I_{CBO}$	Collector Cut-off Current	$V_{CB}=-230V, I_E=0$			-5.0	$\mu A$
$I_{EBO}$	Emitter Cut-off Current	$V_{EB}=-5V, I_C=0$			-5.0	$\mu A$
$h_{FE1}$	* DC Current Gain	$V_{CE}=-5V, I_C=-1A$	55		160	
$h_{FE2}$	DC Current Gain	$V_{CE}=-5V, I_C=-7A$	35	60		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=-8A, I_B=-0.8A$		-0.4	-3.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$V_{CE}=-5V, I_C=-7A$		-1.0	-1.5	V
$f_T$	Current Gain Bandwidth Product	$V_{CE}=-5V, I_C=-1A$		30		MHz
$C_{ob}$	Output Capacitance	$V_{CB}=-10V, f=1MHz$		360		pF

\* Pulse Test : PW=20us

### \* $h_{FE}$ Classification

Classification	R	O
$h_{FE1}$	55 ~ 110	80 ~ 160

# Typical Characteristics

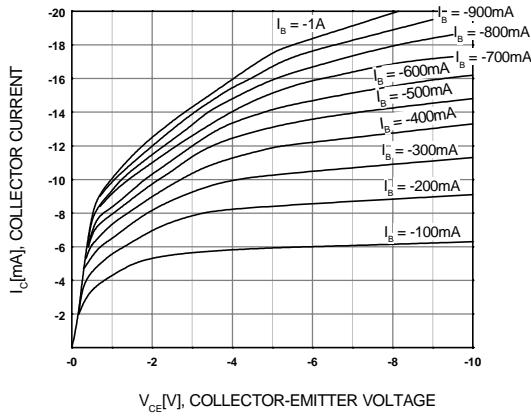


Figure 1. Static Characteristic

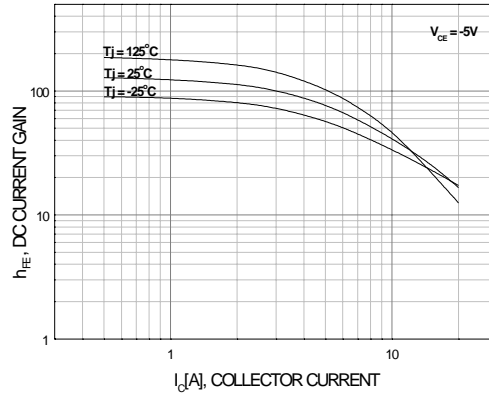


Figure 2. DC current Gain

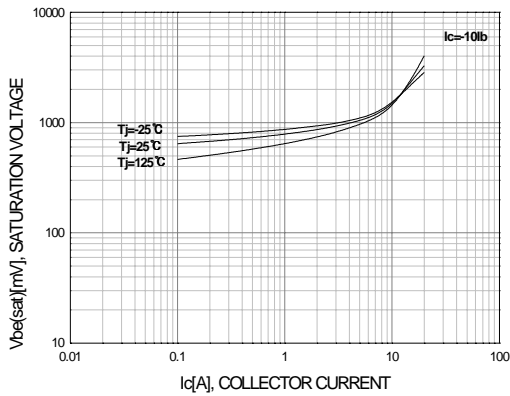


Figure 3. Base-Emitter Saturation Voltage

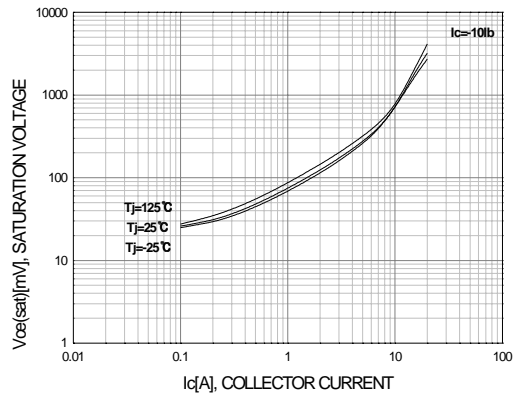


Figure 4. Collector-Emitter Saturation Voltage

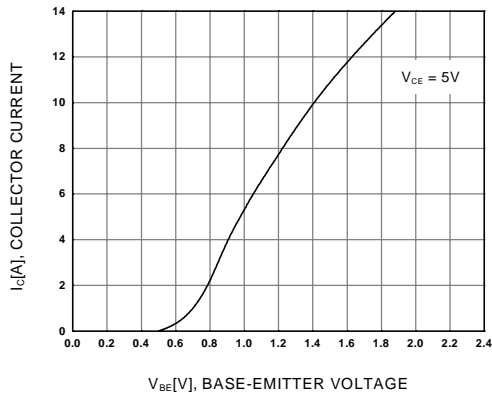


Figure 5. Base-Emitter On Voltage

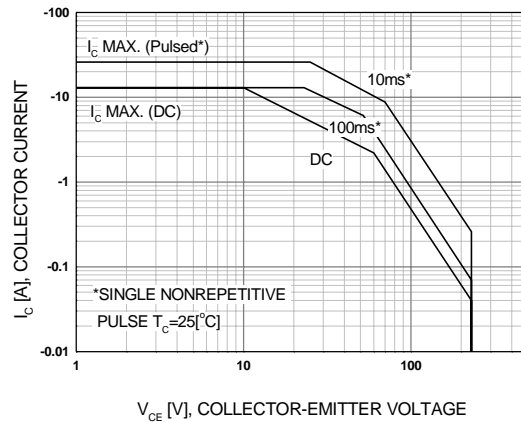


Figure 6. Safe Operating Area

# Typical Characteristics

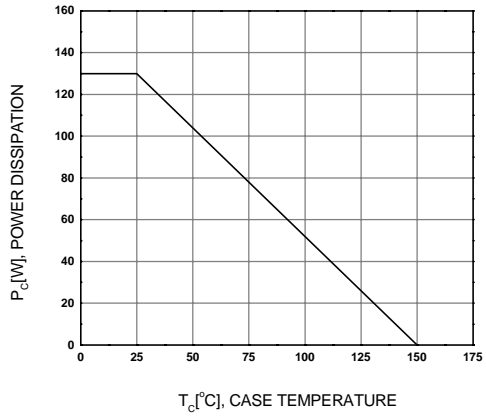
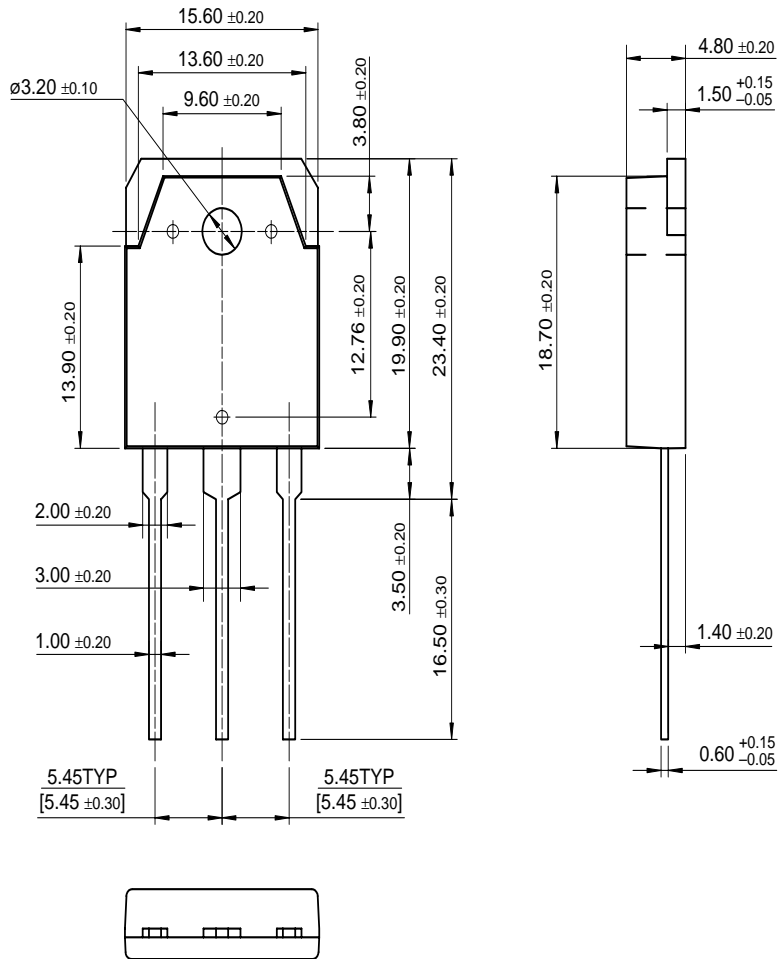


Figure 7. Power Derating

Package Dimensions

TO-3P



Dimensions in Millimeters

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