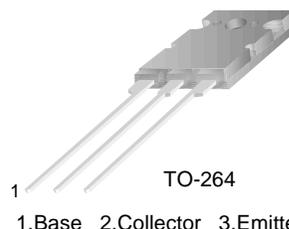


FJL4315

Audio Power Amplifier

- High Current Capability : $I_C=15A$
- High Power Dissipation
- Wide S.O.A
- Complement to FJL4215



NPN Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	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(DC)	15	A
I_B	Base Current	1.5	A
P_C	Collector Dissipation ($T_C=25^\circ C$)	150	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	μA
I_{EBO}	Emitter Cut-off Current	$V_{EB}=5V, I_C=0$			5.0	μA
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	$V_{CB}=10V, f=1MHz$		200		pF

* Pulse Test : $PW=20\mu s$

h_{FE} Classification

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

Typical Characteristics

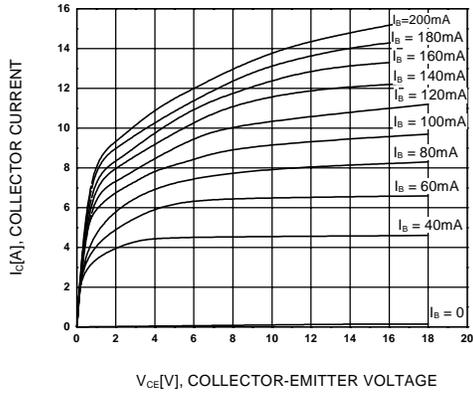


Figure 1. Static Characteristic

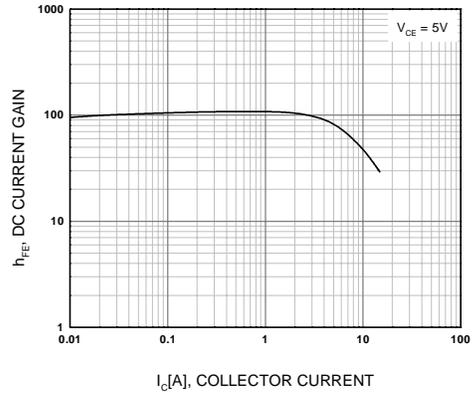


Figure 2. DC current Gain

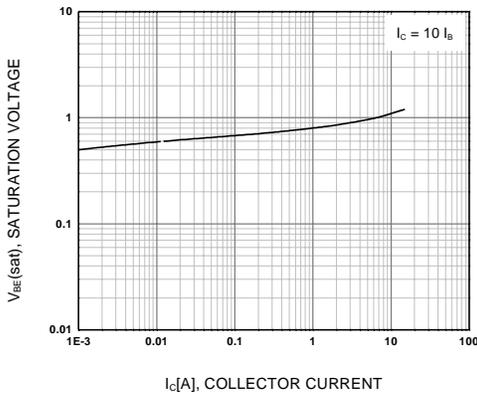


Figure 3. Base-Emitter Saturation Voltage

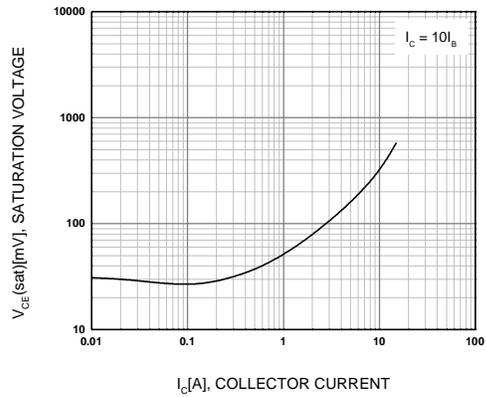


Figure 4. Collector-Emitter Saturation Voltage

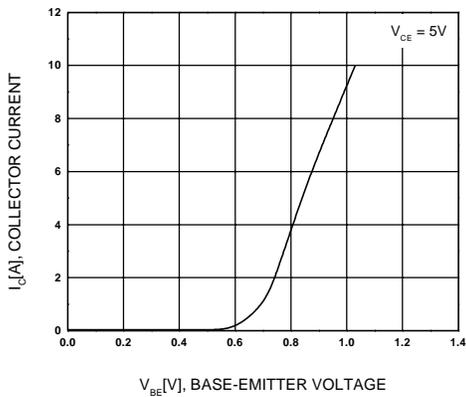


Figure 5. Base-Emitter On Voltage

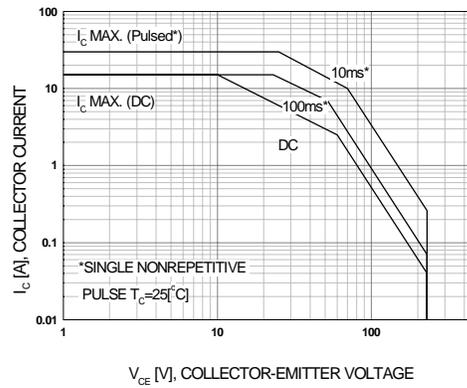


Figure 6. Safe Operating Area

Typical Characteristics

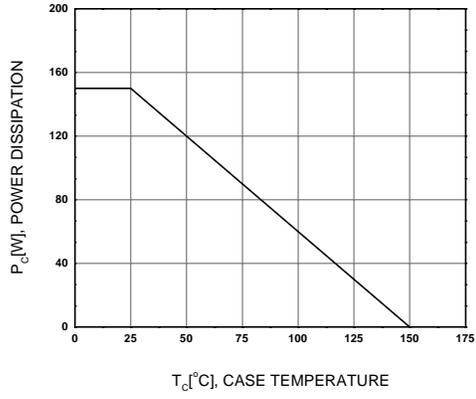


Figure 7. Power Derating

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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.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.

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FJL4315

NPN Epitaxial Silicon Transistor

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Features

- High Current Capability : $I_C=15A$
- High Power Dissipation
- Wide S.O.A
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Product status/pricing/packageing

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Product	Product status	Pb-free Status	Pricing*	Package type	Leads	Packing method	Package Marking Convention**
FJL4315OTU	Full Production	 Full Production	\$2.44	TO-264	3	RAIL	Line 1: \$Y (Fairchild logo) Line 2: J4315-O Line 3: &3

* Fairchild 1,000 piece Budgetary Pricing

** A sample button will appear if the part is available through Fairchild's on-line samples program. If there is no sample button, please contact a [Fairchild distributor](#) to obtain samples



Indicates product with Pb-free second-level interconnect. For more information [click here](#).

Package marking information for product FJL4315 is available. [Click here for more information](#).

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Models

Package & leads	Condition	Temperature range	Vcc range	Software version	Revision date
PSPICE					
TO-264-3	Electrical	-50°C to 150°C	0V to 18V	OrCAD 10.3	May 11, 2007

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Qualification Support

Click on a product for detailed qualification data

Product
FJL4315OTU

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