FAIRCHILD
SEMICONDUCTOR ™

KSA614

Low Frequency Power Amplifier
Power Regulator

- Collector-Base Voltage : V_{CBO} = -80V
- Collector Dissipation : P_C=25W (T_C=25°C)

TO-220

1.Base   2.Collector   3.Emitter

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector- Base Voltage	- 80	V
V_{CEO}	Collector- Emitter Voltage	- 55	V
V_{EBO}	Emitter- Base Voltage	- 5	V
I_C	Collector Current	- 3	A
P_C	Collector Dissipation (T_C=25°C)	25	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 = - 500μA, I_E = 0	- 80			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C = - 10mA, I_B = 0	- 55			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = - 500μA, I_C = 0	- 5			V
I_{CBO}	Collector Cut-off Current	V_{CB} = - 50V, I_E = 0			- 50	μA
h_{FE}	DC Current Gain	V_{CE} = - 5V, I_C = - 0.5A	40		240	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = - 1A, I_B = - 0.1A		- 0.15	- 0.5	V

h_{FE} Classification

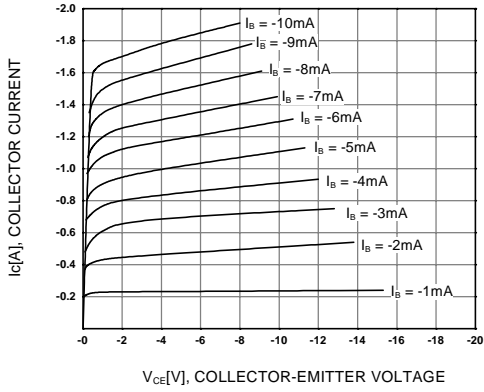| Classification	R	O	Y
h_{FE}	40 ~ 80	70 ~ 140	120 ~ 240

Typical Characteristics
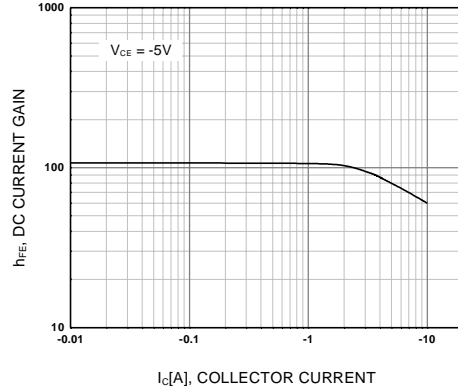
Figure 1. Static Characteristic
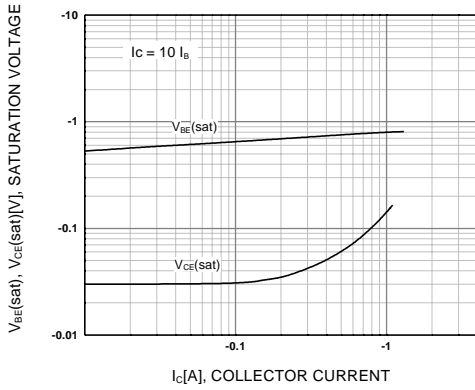
Figure 2. DC current Gain

Figure 3. Base-Emitter Saturation Voltage
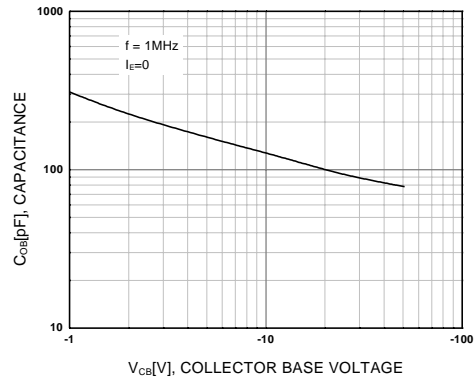**Collector-Emitter Saturation Voltage**
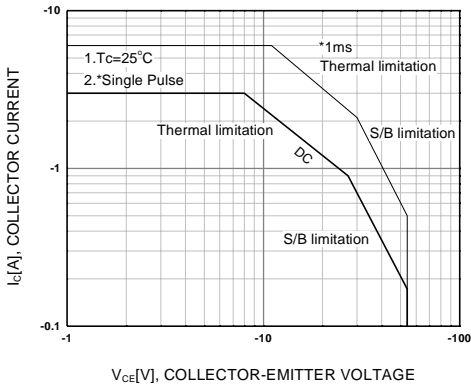
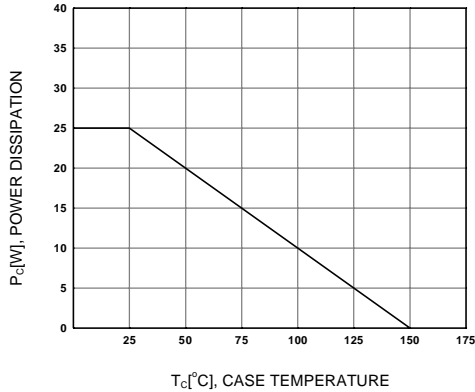**Figure 4. Collector Output Capacitance**

Figure 5. Safe Operating Area

Figure 6. Power Derating

Package Demensions

TO-220

9.90 ±0.20

(8.70)

(1.70)

1.30 ±0.10

ø3.60 ±0.10

2.80 ±0.10

9.20 ±0.20

(1.46)

(3.70)

(3.00)

15.90 ±0.20

18.95MAX.

(45°)

13.08 ±0.20

(1.00)

10.08 ±0.30

1.27 ±0.10

1.52 ±0.10

0.80 ±0.10

2.54TYP
[2.54 ±0.20]

2.54TYP
[2.54 ±0.20]

4.50 ±0.20

1.30 +0.10 −0.05

0.50 +0.10 −0.05

2.40 ±0.20

10.00 ±0.20
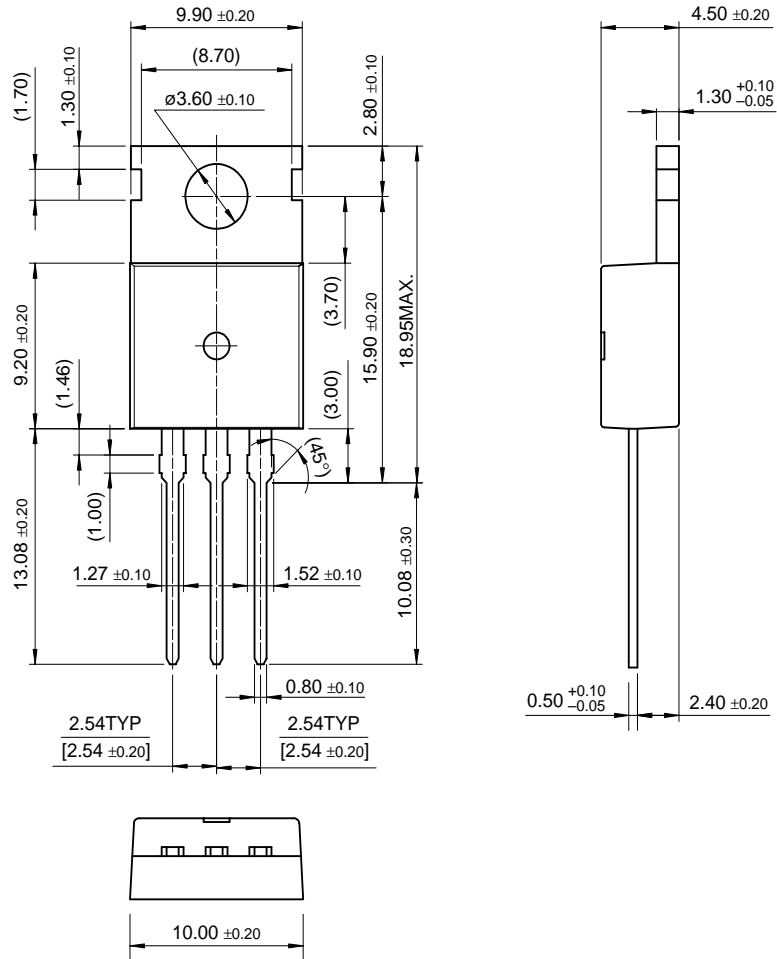
Dimensions in Millimeters

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