

## **KSA614**

### **Low Frequency Power Amplifier Power Regulator**



1.Base 2.Collector 3.Emitter

## **PNP Epitaxial Silicon Transistor**

### Absolute Maximum Ratings T<sub>C</sub>=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V <sub>CBO</sub>	Collector- Base Voltage	- 80	V
$V_{CEO}$	Collector- Emitter Voltage	- 55	V
V <sub>EBO</sub>	Emitter- Base Voltage	- 5	V
I <sub>C</sub>	Collector Current	- 3	Α
P <sub>C</sub>	Collector Dissipation (T <sub>C</sub> =25°C)	25	W
TJ	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	- 55 ~ 150	°C

### Electrical Characteristics T<sub>C</sub>=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	$I_C = -500 \mu A, I_E = 0$	- 80			V
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	$I_C = -10 \text{mA}, I_B = 0$	- 55			V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	$I_E = -500 \mu A, I_C = 0$	- 5			V
I <sub>CBO</sub>	Collector Cut-off Current	$V_{CB} = -50V, I_{E} = 0$			- 50	μΑ
h <sub>FE</sub>	DC Current Gain	$V_{CE} = -5V, I_{C} = -0.5A$	40		240	
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	$I_C = -1A, I_B = -0.1A$		- 0.15	- 0.5	V

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

Classification	R	0	Y
h <sub>FE</sub>	40 ~ 80	70 ~ 140	120 ~ 240

# **Typical Characteristics**

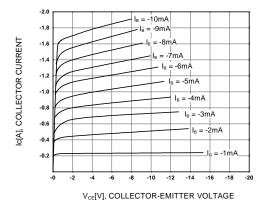


Figure 1. Static Characteristic

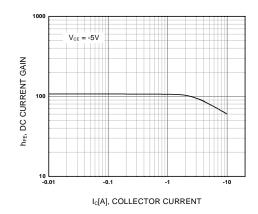


Figure 2. DC current Gain

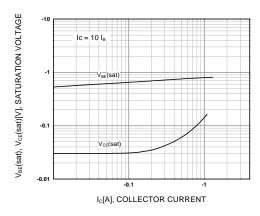


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

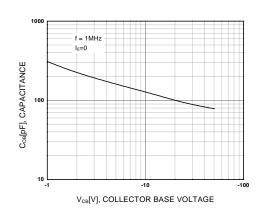


Figure 4. Collector Output Capacitance

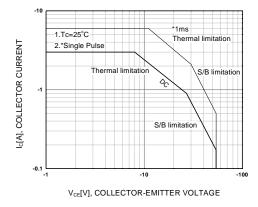


Figure 5. Safe Operating Area

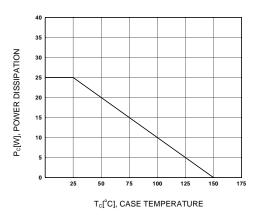
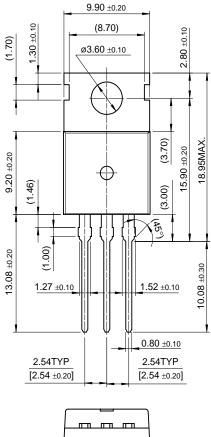


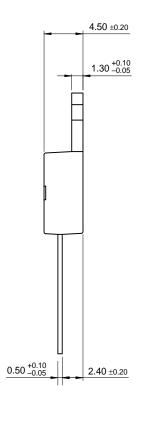
Figure 6. Power Derating

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# **Package Demensions**

# TO-220





10.00 ±0.20

Dimensions in Millimeters

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