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KSA614

Low Frequency Power Amplifier Power Regulator

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



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 | А |
| P _C | Collector Dissipation (T _C =25°C) | 25 | 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 | $I_C = -500 \mu A, I_E = 0$ | - 80 | | | V |
| BV _{CEO} | Collector-Emitter Breakdown Voltage | I _C = - 10mA, I _B = 0 | - 55 | | | V |
| BV _{EBO} | Emitter-Base Breakdown Voltage | $I_E = -500 \mu A, I_C = 0$ | - 5 | | | V |
| I _{CBO} | Collector Cut-off Current | $V_{CB} = -50V, I_{E} = 0$ | | | - 50 | μΑ |
| 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 | 0 | Y |
|-----------------|---------|----------|-----------|
| h _{FE} | 40 ~ 80 | 70 ~ 140 | 120 ~ 240 |

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Typical Characteristics

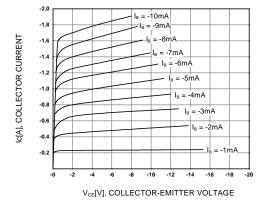


Figure 1. Static Characteristic

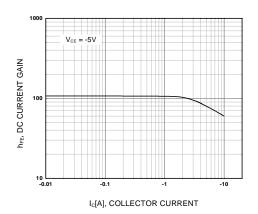


Figure 2. DC current Gain

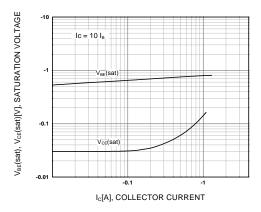


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

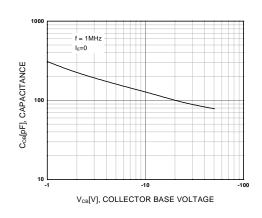


Figure 4. Collector Output Capacitance

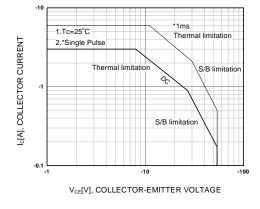


Figure 5. Safe Operating Area

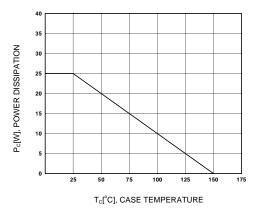
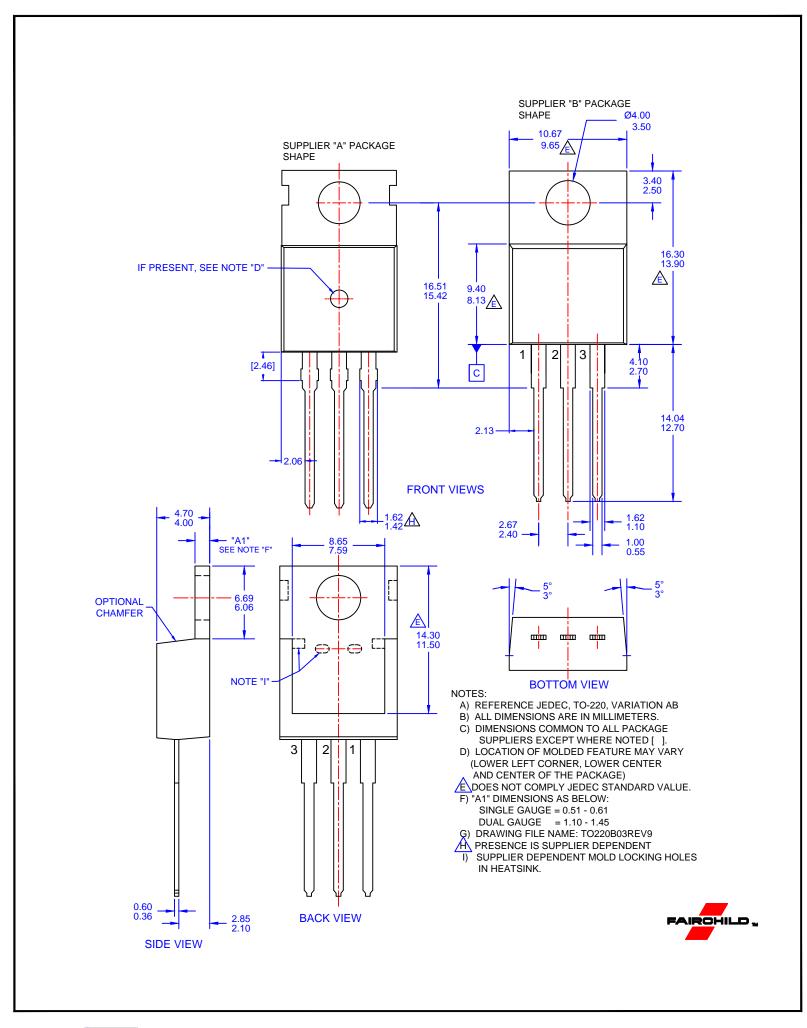


Figure 6. Power Derating

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