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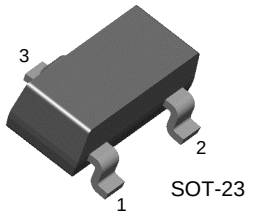
# KSA1298

## Low Frequency Power Amplifier

- Complement to KSC3265




SOT-23

1. Base 2. Emitter 3. Collector

## PNP Epitaxial Silicon Transistor

### Absolute Maximum Ratings $T_a$=25°C unless otherwise noted

| Symbol | Parameter | Ratings | Units |
|---|---|---|---|
| $V_{CBO}$ | Collector-Base Voltage | -30 | V |
| $V_{CEO}$ | Collector-Emitter Voltage | -25 | V |
| $V_{EBO}$ | Emitter-Base Voltage | -5 | V |
| $I_C$ | Collector Current | -800 | mA |
| $I_B$ | Base Current | -160 | mA |
| $P_C$ | Collector Power Dissipation | 200 | mW |
| $T_J$ | Junction Temperature | 150 | °C |
| $T_{STG}$ | Storage Temperature | -55 ~ 150 | °C |

• Refer to KSA643 for graphs.

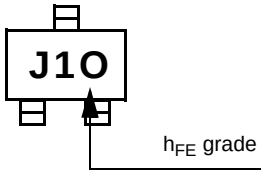
### Electrical Characteristics $T_a$=25°C unless otherwise noted

| Symbol | Parameter | Test Condition | Min. | Typ. | Max. | Units |
|---|---|---|---|---|---|---|
| $BV_{CEO}$ | Collector-Emitter Breakdown Voltage | $I_C$= -10mA, $I_B$=0 | -25 | | | V |
| $BV_{EBO}$ | Emitter-Base Breakdown Voltage | $I_E$= -1mA, $I_C$=0 | -5 | | | V |
| $I_{CBO}$ | Collector Cut-off Current | $V_{CB}$= -30V, $I_E$=0 | | | -100 | nA |
| $I_{EBO}$ | Emitter Cut-off Current | $V_{BE}$= -5V, $I_C$=0 | | | -100 | nA |
| $h_{FE1}$<br>$h_{FE2}$ | DC Current Gain | $V_{CE}$= -1V, $I_C$= -100mA<br>$V_{CE}$= -1V, $I_C$= -800mA | 100<br>40 | | 320 | |
| $V_{CE}$ (sat) | Collector-Emitter Saturation Voltage | $I_C$= -500mA, $I_B$= -20mA | | | -0.4 | V |
| $V_{BE}$ (on) | Base-Emitter On Voltage | $V_{CE}$= -1V, $I_C$= -10mA | -0.5 | | -0.8 | V |
| $f_T$ | Current Gain Bandwidth Product | $V_{CE}$= -5V, $I_C$= -10mA | | 120 | | MHz |
| $C_{ob}$ | Output Capacitance | $V_{CB}$= -10V, $I_E$= 0, f=1MHz | | 13 | | pF |

### $h_{FE1}$ Classification

| Classification | O | Y |
|---|---|---|
| $h_{FE1}$ | 100 ~ 200 | 160 ~ 320 |

Marking

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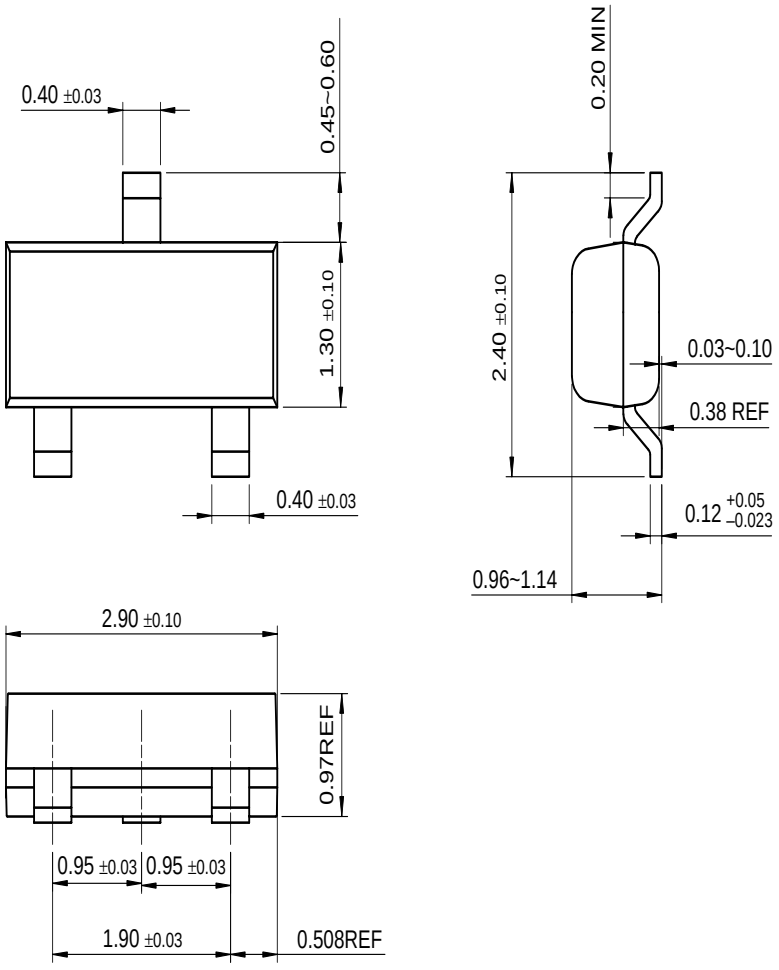
## Package Demensions

SOT-23




Dimensions in Millimeters

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