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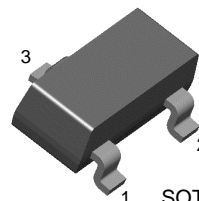
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KSC3265

KSC3265

Low Frequency Amplifier

- Complement to KSA1298



1. Base 2. Emitter 3. Collector

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Value | 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 | $^\circ\text{C}$ |
| T_{STG} | Storage Temperature | -55 ~ 150 | $^\circ\text{C}$ |

* Refer to KSD261 for graphs

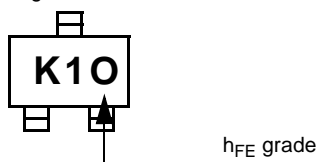
Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Test Condition | Min. | Typ. | Max. | Units |
|---------------|--------------------------------------|---|------|------|------|-------|
| BV_{CEO} | Collector-Emitter Breakdown Voltage | $I_C=10\text{mA}, I_B=0$ | 25 | | | V |
| BV_{EBO} | Emitter-Base Breakdown Voltage | $I_E=1\text{mA}, I_C=0$ | 5 | | | V |
| I_{CBO} | Collector Cut-off Current | $V_{CB}=30\text{V}, I_E=0$ | | | 100 | nA |
| I_{EBO} | Emitter Cut-off Current | $V_{EB}=5\text{V}, I_C=0$ | | | 100 | nA |
| h_{FE1} | DC Current Gain | $V_{CE}=1\text{V}, I_C=100\text{mA}$ | 100 | | 320 | |
| h_{FE2} | | $V_{CE}=6\text{V}, I_C=800\text{mA}$ | 40 | | | |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C=500\text{mA}, I_B=20\text{mA}$ | | | 0.4 | V |
| $V_{BE(on)}$ | Base-Emitter On Voltage | $V_{CE}=1\text{V}, I_C=10\text{mA}$ | 0.5 | | 0.8 | V |
| f_T | Current Gain Bandwidth Product | $V_{CE}=5\text{V}, I_C=10\text{mA}$ | | 120 | | MHz |
| C_{ob} | Output Capacitance | $V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$ | | 13 | | pF |

h_{FE} Classification

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

Marking



Package Dimensions

SOT-23



Dimensions in Millimeters

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