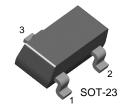


KST2484

Low Noise Transistor



1. Base 2. Emitter 3. Collector

NPN Epitaxial Silicon Transistor

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

| Symbol | Parameter | Value | Units | |
|------------------|-----------------------------|-------|-------|--|
| V _{CBO} | Collector Base Voltage | 60 | V | |
| V _{CEO} | Collector-Emitter Voltage | 60 | V | |
| V _{EBO} | Emitter-Base Voltage | 6 | V | |
| I _C | Collector Current | 50 | mA | |
| P _C | Collector Power Dissipation | 350 | mW | |
| T _{STG} | Storage Temperature | 150 | °C | |

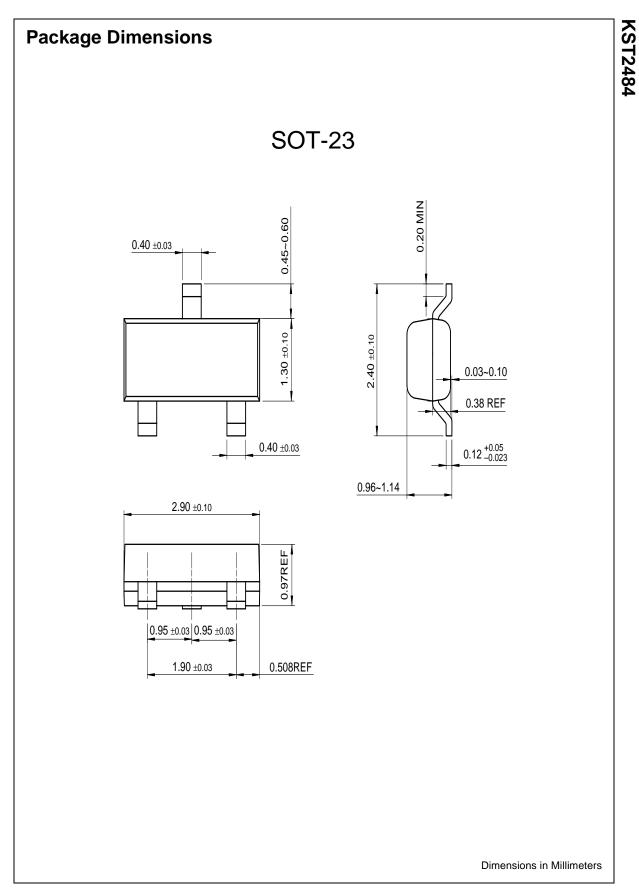
Refer to KSP5088 for graphs

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

| Symbol | Parameter | Test Condition | Min. | Max. | Units |
|-----------------------|--------------------------------------|---|------|------|-------|
| BV _{CBO} | Collector-Base Breakdown Voltage | I _C =10μA, I _E =0 | 60 | | V |
| BV _{CEO} | Collector-Emitter Breakdown Voltage | I _C =10mA, I _B =0 | 60 | | V |
| BV _{EBO} | Emitter-Base Breakdown Voltage | I _E =10μA, I _C =0 | 5 | | V |
| I _{CBO} | Collector Cut-off Current | V _{CB} =45V, I _E =0 | | 10 | nA |
| I _{EBO} | Emitter Cut-off Current | V _{EB} =5V, I _C =0 | | 10 | nA |
| h _{FE} | DC Current Gain | V _{CE} =5V, I _C =1mA V _{CE} =5V, I _C =10mA | 250 | 800 | |
| V _{CE} (sat) | Collector-Emitter Saturation Voltage | I _C =1mA, I _B =0.1mA | | 0.35 | V |
| V _{BE} (on) | Base-Emitter On Voltage | I _C =1mA, V _{CE} =5V | | 0.95 | V |
| C _{ob} | Output Capacitance | V _{CB} =5.0V, I _E =0, f=1MHz, | | 6 | pF |
| NF | Noise Figure | I _C =10μΑ, V _{CE} =5V R _S =10KΩ, f=1KHz | | 3 | dB |







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Definition of Terms

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|--------------------------|---------------------------|---|
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