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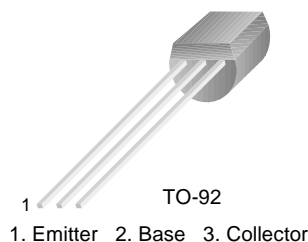
For any questions, you can email us directly:

sales@integrated-circuit.com



PN2222

General Purpose Transistor



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 | 60 | V |
| V_{CEO} | Collector-Emitter Voltage | 30 | V |
| V_{EBO} | Emitter-Base Voltage | 5 | V |
| I_C | Collector Current | 600 | mA |
| P_C | Collector Power Dissipation | 625 | mW |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{STG} | Storage Temperature | -55 ~ 150 | $^\circ\text{C}$ |

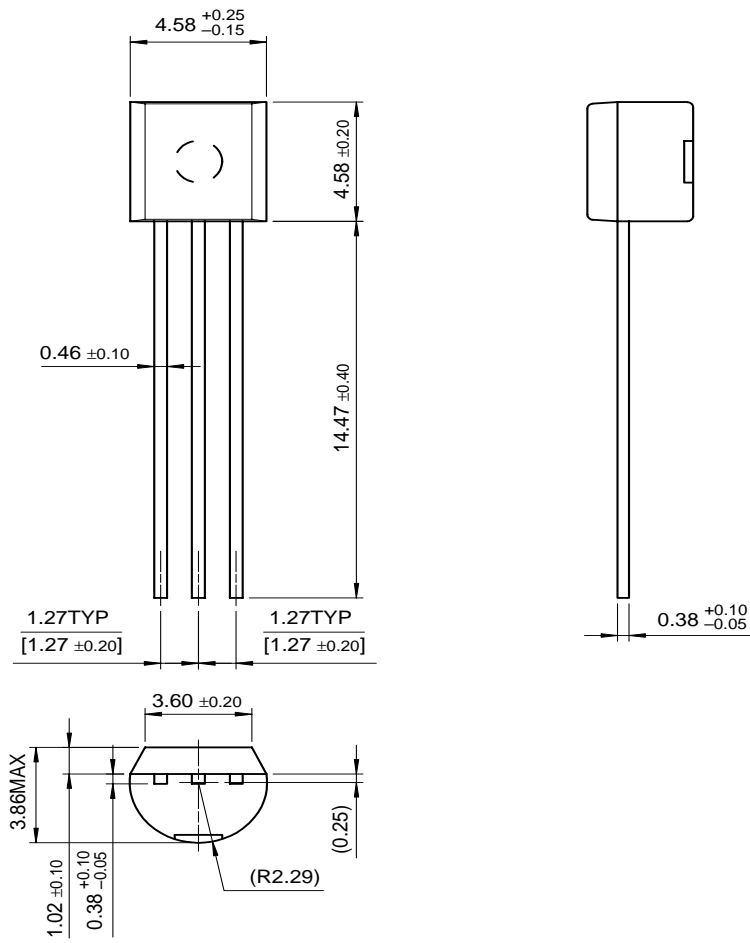
Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Test Condition | Min. | Max. | Units |
|----------------------|--|---|-----------|------|---------------|
| BV_{CBO} | Collector-Base Breakdown Voltage | $I_C=10\mu\text{A}, I_E=0$ | 60 | | V |
| BV_{CEO} | Collector Emitter Breakdown Voltage | $I_C=10\text{mA}, I_B=0$ | 30 | | V |
| BV_{EBO} | Emitter-Base Breakdown Voltage | $I_E=10\mu\text{A}, I_C=0$ | 5 | | V |
| I_{CBO} | Collector Cut-off Current | $V_{CB}=50\text{V}, I_E=0$ | | 0.01 | μA |
| I_{EBO} | Emitter Cut-off Current | $V_{EB}=3\text{V}, I_C=0$ | | 10 | nA |
| h_{FE} | DC Current Gain | $V_{CE}=10\text{V}, I_C=0.1\text{mA}$ $V_{CE}=10\text{V}, *I_C=150\text{mA}$ | 35 100 | 300 | |
| $V_{CE}(\text{sat})$ | * Collector-Emitter Saturation Voltage | $I_C=500\text{mA}, I_B=50\text{mA}$ | | 1 | V |
| $V_{BE}(\text{sat})$ | * Base-Emitter Saturation Voltage | $I_C=500\text{mA}, I_B=50\text{mA}$ | | 2 | V |
| f_T | Current Gain Bandwidth Product | $V_{CE}=20\text{V}, I_C=20\text{mA}, f=100\text{MHz}$ | 300 | | MHz |
| C_{ob} | Output Capacitance | $V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$ | | 8 | pF |

* Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

Package Dimensions

TO-92



Dimensions in Millimeters

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| | | | | |
|--------------------------------------|---------------------|---------------|---------------------|-----------------|
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| ActiveArray™ | FASTr™ | LittleFET™ | PowerEdge™ | SuperFET™ |
| Bottomless™ | FPS™ | MICROCOUPLER™ | PowerSaver™ | SuperSOT™-3 |
| CoolFET™ | FRFET™ | MicroFET™ | PowerTrench® | SuperSOT™-6 |
| CROSSVOLT™ | GlobalOptoisolator™ | MicroPak™ | QFET® | SuperSOT™-8 |
| DOME™ | GTO™ | MICROWIRE™ | QS™ | SyncFET™ |
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| E ² C MOS™ | I ² C™ | MSXPro™ | Quiet Series™ | TINYOPTO™ |
| EnSigna™ | i-Lo™ | OCX™ | RapidConfigure™ | TruTranslation™ |
| FACT™ | ImpliedDisconnect™ | OCXPro™ | RapidConnect™ | UHC™ |
| FACT Quiet Series™ | | OPTOLOGIC® | μSerDes™ | UltraFET® |
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|--------------------------|------------------------|---|
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