



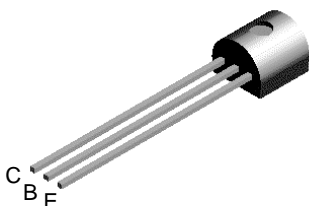
Micro Commercial Components
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S8550

Features

- TO-92 Plastic-Encapsulate Transistors
- Capable of 0.625Watts($T_{amb}=25^{\circ}\text{C}$) of Power Dissipation.
- Collector-current 0.5A
- Collector-base Voltage 40V
- Operating and storage junction temperature range: -55°C to $+150^{\circ}\text{C}$
- Marking Code: S8550

Pin Configuration



Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Max | Units |
|--------|-----------|-----|-----|-------|
|--------|-----------|-----|-----|-------|

OFF CHARACTERISTICS

| | | | | |
|---------------|---|-----|-----|-----------------|
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage ($I_C=100\mu\text{Adc}$, $I_E=0$) | 40 | --- | Vdc |
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage ($I_C=0.1\text{mAdc}$, $I_B=0$) | 25 | --- | Vdc |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage ($I_E=100\mu\text{Adc}$, $I_C=0$) | 5.0 | --- | Vdc |
| I_{CBO} | Collector Cutoff Current ($V_{CB}=40\text{Vdc}$, $I_E=0$) | --- | 0.1 | μAdc |
| I_{CEO} | Collector Cutoff Current ($V_{CE}=20\text{Vdc}$, $I_B=0$) | --- | 0.2 | μAdc |
| I_{EBO} | Emitter Cutoff Current ($V_{EB}=3.0\text{Vdc}$, $I_C=0$) | --- | 0.1 | μAdc |

ON CHARACTERISTICS

| | | | | |
|---------------|--|-----|-----|-----|
| $h_{FE(1)}$ | DC Current Gain ($I_C=50\text{mAdc}$, $V_{CE}=1.0\text{Vdc}$) | 85 | 300 | --- |
| $h_{FE(2)}$ | DC Current Gain ($I_C=500\text{mAdc}$, $V_{CE}=1.0\text{Vdc}$) | 40 | --- | --- |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage ($I_C=500\text{mAdc}$, $I_B=50\text{mAdc}$) | --- | 0.6 | Vdc |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage ($I_C=500\text{mAdc}$, $I_B=50\text{mAdc}$) | --- | 1.2 | Vdc |
| V_{EB} | Base- Emitter Voltage ($I_E=100\text{mAdc}$) | --- | 1.4 | Vdc |

SMALL-SIGNAL CHARACTERISTICS

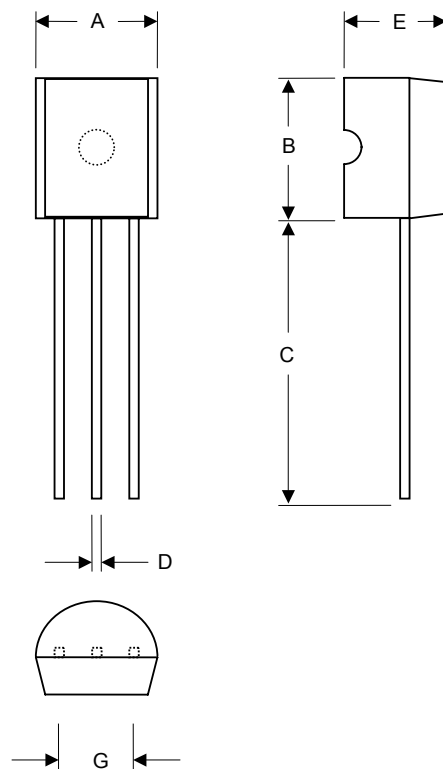
| | | | | |
|-------|---|-----|-----|-----|
| f_T | Transistor Frequency ($I_C=20\text{mAdc}$, $V_{CE}=6.0\text{Vdc}$, $f=30\text{MHz}$) | 150 | --- | MHz |
|-------|---|-----|-----|-----|

CLASSIFICATION OF $h_{FE(1)}$

| Rank | B | C | D |
|-------|--------|---------|---------|
| Range | 85-160 | 120-200 | 160-300 |

PNP Silicon Transistors

TO-92



| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .175 | .185 | 4.45 | 4.70 | |
| B | .175 | .185 | 4.46 | 4.70 | |
| C | .500 | --- | 12.7 | --- | |
| D | .016 | .020 | 0.41 | 0.63 | |
| E | .135 | .145 | 3.43 | 3.68 | |
| G | .095 | .105 | 2.42 | 2.67 | |