



TO-92 Plastic-Encapsulate Transistors

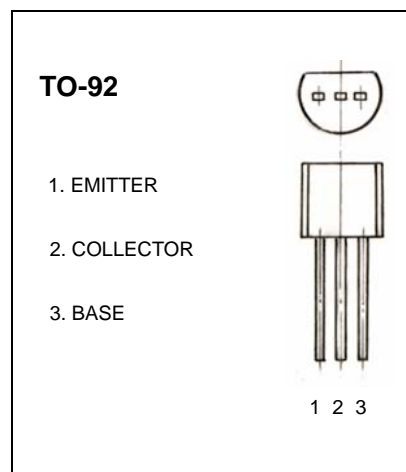
2SA608 TRANSISTOR (PNP)

FEATURES

- Capable of being used in the low frequency to high frequency range.
- Large current capacity and wide ASO.

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

| Symbol | Parameter | Value | Units |
|-----------|-------------------------------|---------|--------------------|
| V_{CBO} | Collector-Base Voltage | -40 | V |
| V_{CEO} | Collector-Emitter Voltage | -30 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current -Continuous | -100 | mA |
| P_C | Collector Power Dissipation | 400 | mW |
| T_J | Junction Temperature | 150 | $^{\circ}\text{C}$ |
| T_{stg} | Storage Temperature | -55-150 | $^{\circ}\text{C}$ |



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|---------------------------------------|-----|-----|------|---------------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=-100\mu\text{A}, I_E=0$ | -40 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=-1\text{mA}, I_B=0$ | -30 | | | V |
| Emitter-Base breakdown voltage | $V_{(BR)EBO}$ | $I_E=-100\mu\text{A}, I_C=0$ | -5 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=-25\text{V}, I_E=0$ | | | -1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=-4\text{V}, I_C=0$ | | | -1 | μA |
| DC current gain | h_{FE} | $V_{CE}=-6\text{V}, I_C=-1\text{mA}$ | 60 | | 560 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=-50\text{mA}, I_B=-5\text{mA}$ | | | -0.5 | V |
| Transition frequency | f_T | $V_{CE}=-6\text{V}, I_C=-10\text{mA}$ | | 180 | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB}=-6\text{V}, f=1\text{MHz}$ | | 7 | | pF |

CLASSIFICATION OF h_{FE}

| Rank | D | E | F | G |
|-------|--------|---------|---------|---------|
| Range | 60-120 | 100-200 | 160-320 | 280-560 |

Typical Characteristics

2SA608

