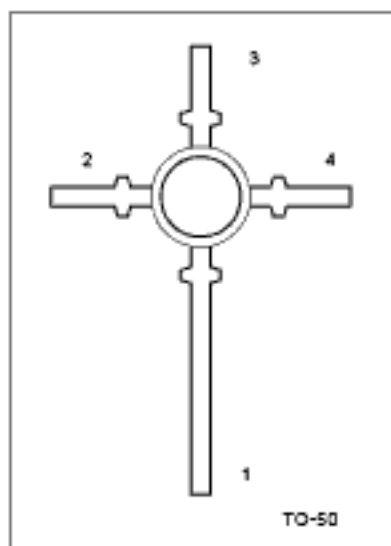


HIGH FREQUENCY LOW NOISE
AMPLIFIER

FEATURES

- *Low Noise and High Gain
- *High Power Gain



1:COLLECTOR 2:EMITTER 3:BASE 4:EMITTER

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

| PARAMETER | SYMBOL | RATING | UNIT |
|---------------------------|-----------|------------|--------------------|
| Collector-base voltage | V_{CB0} | 20 | V |
| Collector-emitter voltage | V_{CE0} | 12 | V |
| Emitter-base voltage | V_{EB0} | 3 | V |
| Collector current | I_C | 100 | mA |
| Total power dissipation | P_T | 250 | mW |
| Junction Temperature | T_j | 150 | $^{\circ}\text{C}$ |
| Storage Temperature | T_{stg} | -65 ~ +150 | $^{\circ}\text{C}$ |

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

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|--------------------------|----------|--|-----|-----|-----|---------------|
| Collector Cutoff Current | I_{C0} | $V_{CE}=10\text{V}, I_B=0$ | | | 1.0 | μA |
| Emitter Cutoff Current | I_{E0} | $V_{BE}=1\text{V}, I_C=0$ | | | 1.0 | μA |
| DC Current Gain | h_{FE} | $V_{CE}=10\text{V}, I_C=20\text{mA}$ | 50 | | 300 | |
| Gain bandwidth Product | f_T | $V_{CE}=10\text{V}, I_C=20\text{mA}$ | | 7 | | GHz |
| Feed-Back Capacitance | C_{re} | $V_{CE}=10\text{V}, I_C=0, f=1.0\text{MHz}$ | | | 1.0 | pF |
| Noise figure | NF | $V_{CE}=10\text{V}, I_C=7\text{mA}, f=1.0\text{GHz}$ | | | 2.0 | dB |

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