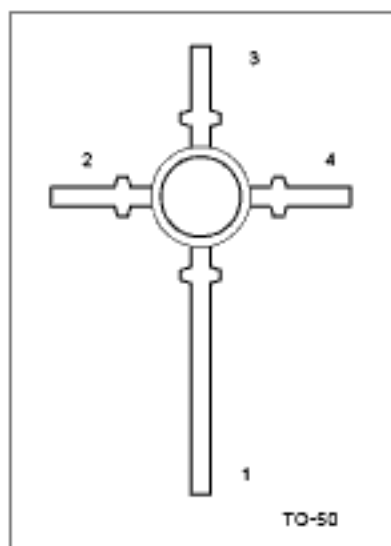


HIGH FREQUENCY LOW NOISE  
AMPLIFIER

## 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 | $\mu\text{A}$ |
| Emitter Cutoff Current   | $I_{E0}$ | $V_{BE}=1\text{V}, I_C=0$                            |     |     | 1.0 | $\mu\text{A}$ |
| 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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