

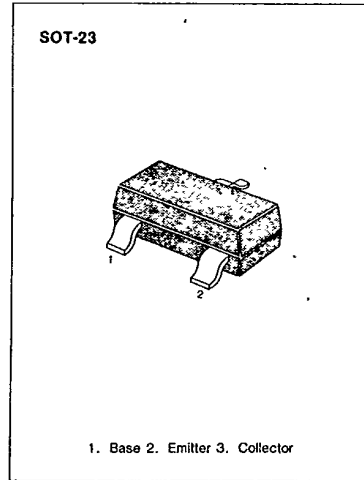
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**RF AMP, FOR VHF TV TUNER**

- LOW NF, HIGH  $G_{pe}$
- $NF=2.0dB$  Typ.  $G_{pe}=23dB$  Typ. ( $f=200MHz$ )
- FORWARD AGC CAPABILITY TO 30 dB

**ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ C$ )**

| Characteristic            | Symbol    | Rating    | Unit       |
|---------------------------|-----------|-----------|------------|
| Collector-Base Voltage    | $V_{CBO}$ | 30        | V          |
| Collector-Emitter Voltage | $V_{CEO}$ | 30        | V          |
| Emitter-Base Voltage      | $V_{EBO}$ | 5         | V          |
| Collector Current (DC)    | $I_C$     | 20        | mA         |
| Collector Dissipation     | $P_C$     | 150       | mW         |
| Junction Temperature      | $T_j$     | 150       | $^\circ C$ |
| Storage Temperature       | $T_{stg}$ | -55 - 150 | $^\circ C$ |

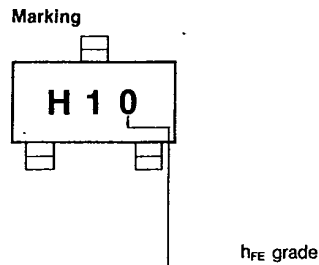


**ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$ )**

| Characteristic                 | Symbol    | Test Condition                                 | Min | Typ | Max | Unit    |
|--------------------------------|-----------|--|-----|-----|-----|---------|
| Collector Cutoff Current       | $I_{CBO}$ | $V_{CB}=20V, I_E=0$                            |     |     | 0.1 | $\mu A$ |
| DC Current Gain                | $h_{FE}$  | $V_{CE}=10V, I_C=3mA$                          | 60  | 120 | 240 |         |
| Current Gain Bandwidth Product | $f_T$     | $V_{CE}=10V, I_C=-3mA$                         | 400 | 600 |     | MHz     |
| Reverse Transfer Capacitance   | $C_{re}$  | $f=1MHz, V_{CB}=10V, I_E=0$                    |     | 0.3 | 0.5 | pF      |
| Power Gain                     | $G_{pe}$  | $f=200MHz, I_C=3mA$                            | 20  | 23  |     | dB      |
| AGC Current                    | $I_{AGC}$ | $f=200MHz$                                     |     | -10 | -12 | mA      |
| Noise Figure                   | NF        | $I_E$ of $G_{pe}$ -30dB<br>$f=200MHz, I_C=3mA$ |     | 2.0 | 3.0 | dB      |

**$h_{FE}$  CLASSIFICATION**

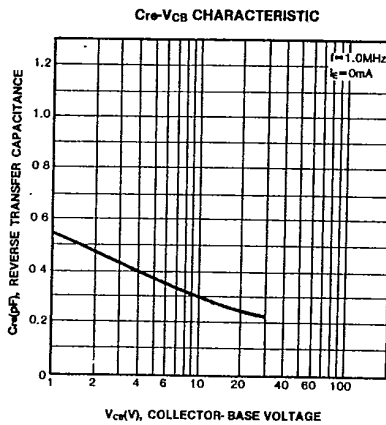
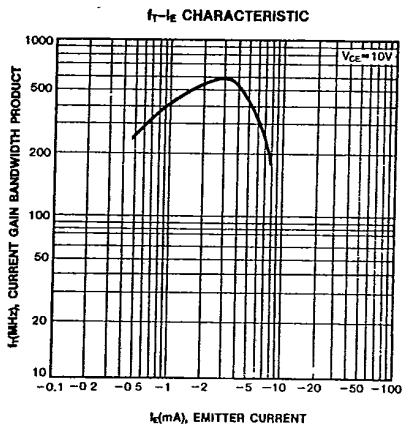
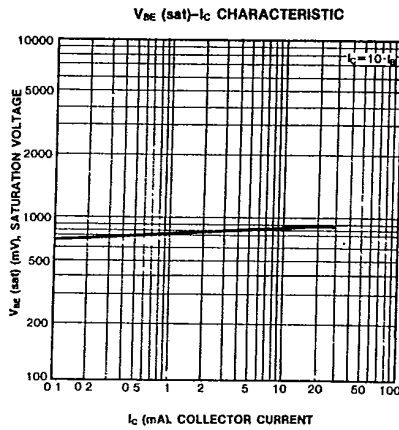
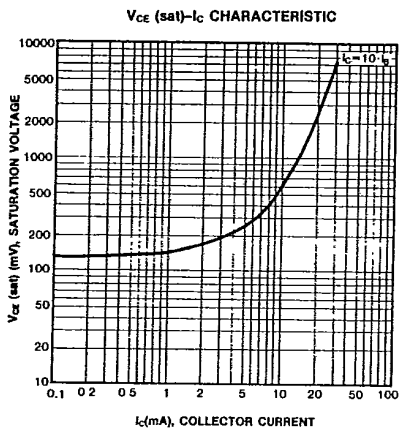
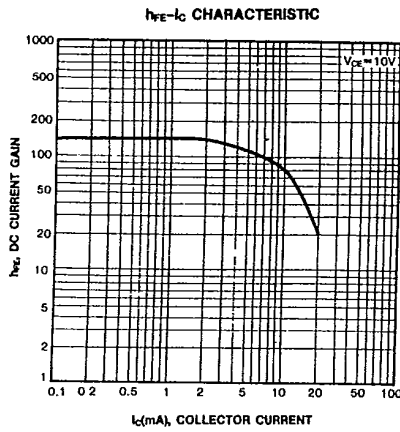
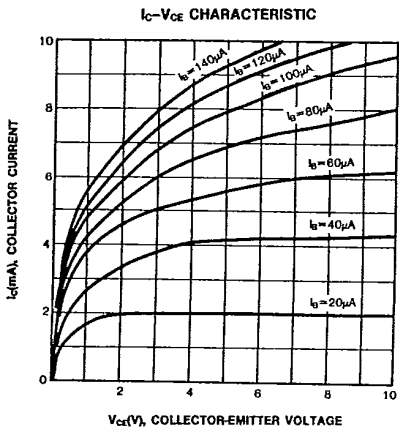
| Classification | R      | O      | Y       |
|----------------|--------|--------|---------|
| $h_{FE}$       | 60-120 | 90-180 | 120-240 |



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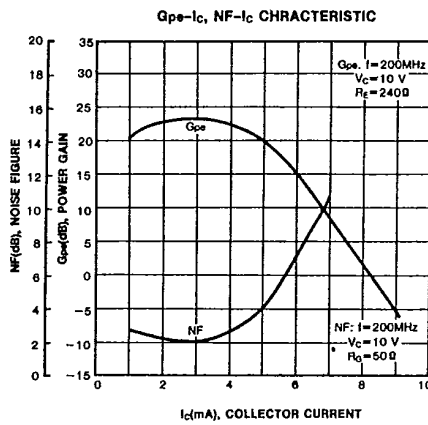
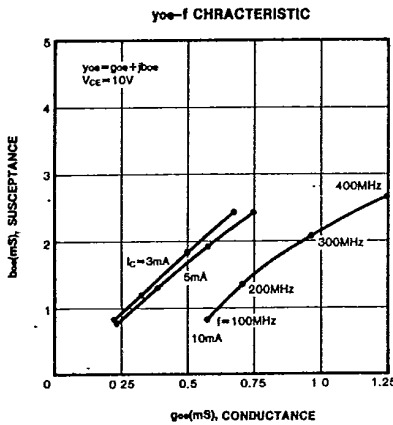
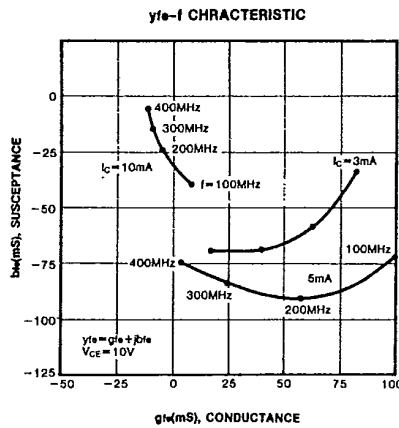
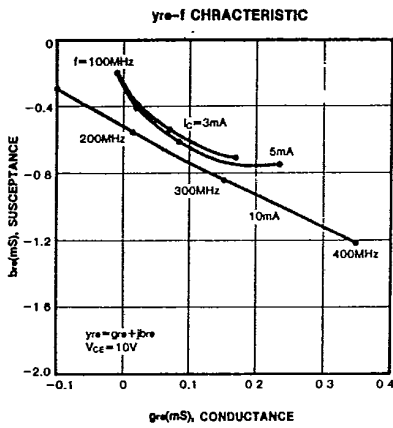
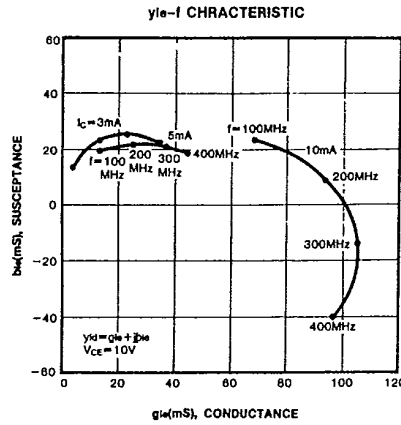
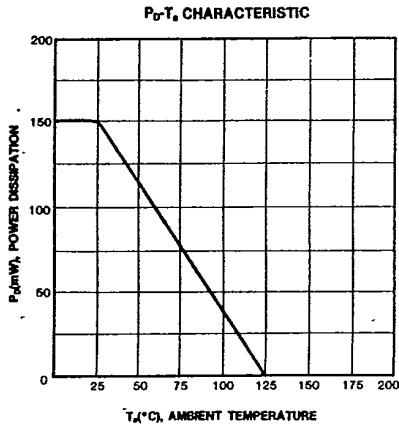
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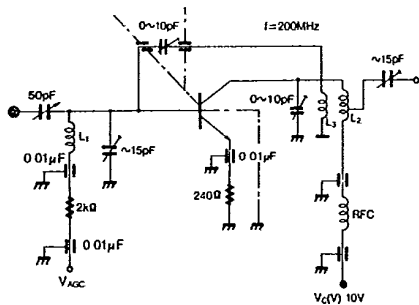


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POWER GAIN AND NOISE FIGURE TEST



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