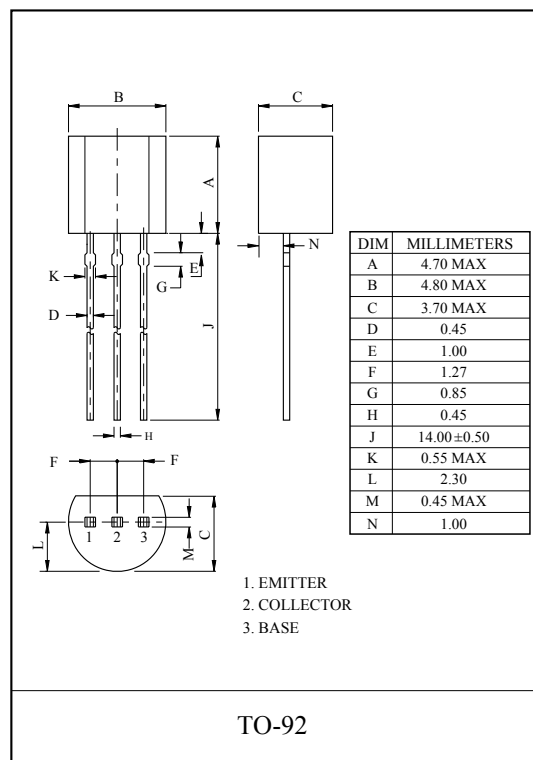


HIGH FREQUENCY APPLICATION.  
TV UHF OSCILLATOR APPLICATION.  
TV VHF MIXER APPLICATION.

## MAXIMUM RATING (Ta=25°C)

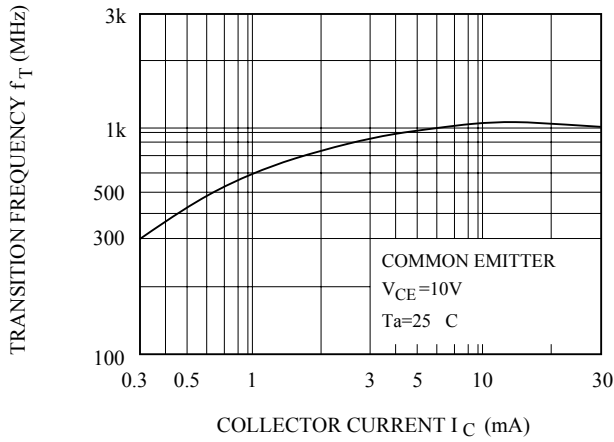
| CHARACTERISTIC              | SYMBOL    | RATING    | UNIT |
|-----------------------------|-----------|-----------|------|
| Collector-Base Voltage      | $V_{CBO}$ | 35        | V    |
| Collector-Emitter Voltage   | $V_{CEO}$ | 15        | V    |
| Emitter-Base Voltage        | $V_{EBO}$ | 3         | V    |
| Collector Current           | $I_C$     | 50        | mA   |
| Emitter Current             | $I_E$     | -50       | mA   |
| Collector Power Dissipation | $P_C$     | 625       | mW   |
| Junction Temperature        | $T_j$     | 150       | °C   |
| Storage Temperature Range   | $T_{stg}$ | -55 ~ 150 | °C   |



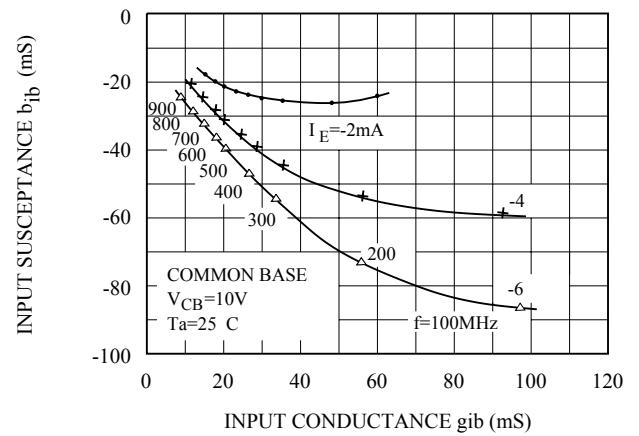
## ELECTRICAL CHARACTERISTICS (Ta=25°C)

| CHARACTERISTIC                      | SYMBOL              | TEST CONDITION                 | MIN. | TYP. | MAX. | UNIT    |
|-------------------------------------|---------------------|--------------------------------|------|------|------|---------|
| Collector Cut-off Current           | $I_{CBO}$           | $V_{CB}=15V, I_E=0$            | -    | -    | 0.1  | $\mu A$ |
| Emitter Cut-off Current             | $I_{EBO}$           | $V_{EB}=3V, I_C=0$             | -    | -    | 1.0  | $\mu A$ |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$       | $I_C=1mA, I_B=0$               | 15   | -    | -    | V       |
| DC Current Gain                     | $h_{FE}$            | $V_{CE}=3V, I_C=8mA$           | 20   | -    | -    |         |
| Transition Frequency                | $f_T$               | $V_{CE}=10V, I_C=8mA$          | 650  | 1100 | -    | MHz     |
| Collector Output Capacitance        | $C_{ob}$            | $V_{CB}=10V, I_E=0, f=1MHz$    | -    | 1.2  | 1.5  | pF      |
| Collector-Base Time Constant        | $C_C \cdot r_{bb'}$ | $V_{CB}=10V, I_C=8mA, f=30MHz$ | -    | -    | 12   | ps      |

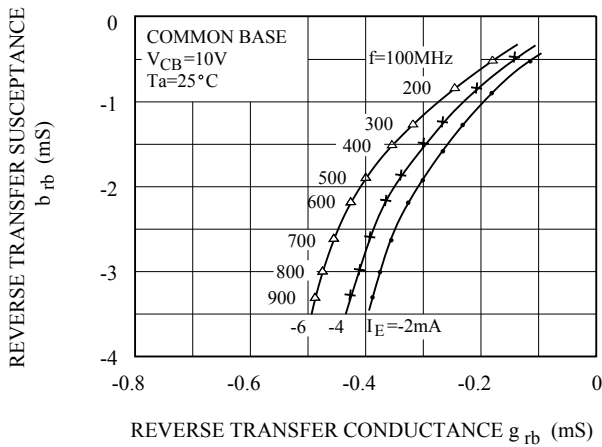
$f_T - I_C$



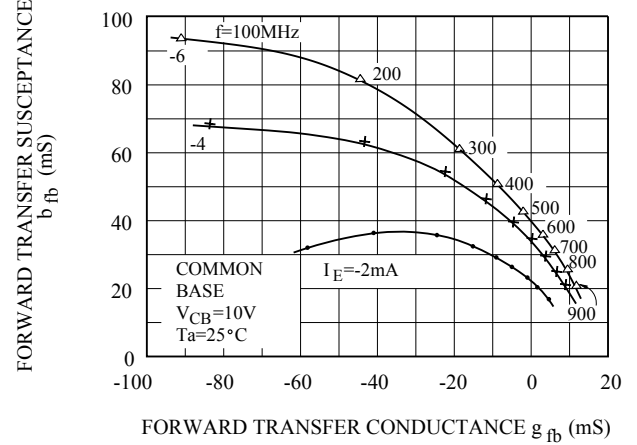
$y_{ib} - f$



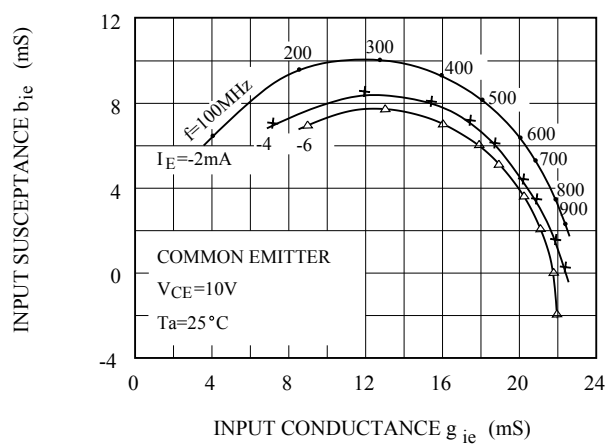
$y_{rb} - f$



$y_{fb} - f$



$y_{ie} - f$



$y_{re} - f$

