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TOSHIBA Transistor Silicon NPN Epitaxial Planar Type

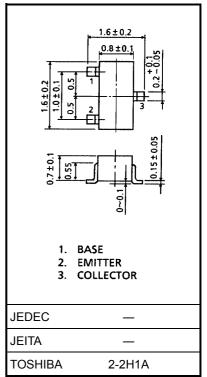
2SC4915

High Frequency Amplifier Applications FM, RF, MIX, If Amplifier Applications

- Small reverse transfer capacitance: $C_{re} = 0.55 \text{ pF}$ (typ.)
- Low noise figure: NF = 2.3dB (typ.)

Maximum Ratings (Ta = 25°C)

| Characteristics | Symbol | Rating | Unit | |
|-----------------------------|------------------|---------|------|--|
| Collector-base voltage | V _{CBO} | 40 | V | |
| Collector-emitter voltage | V _{CEO} | 30 | V | |
| Emitter-base voltage | V _{EBO} | 4 | V | |
| Collector current | Ι _C | 20 | mA | |
| Base current | Ι _Β | 4 | mA | |
| Collector power dissipation | P _C | 100 | mW | |
| Junction temperature | Tj | 125 | °C | |
| Storage temperature range | T _{stg} | -55~125 | °C | |



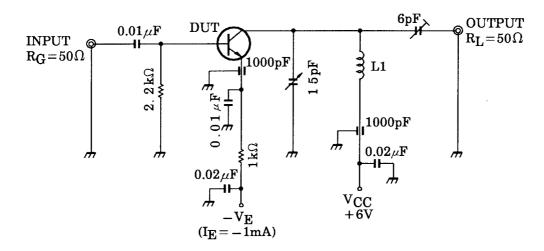
Weight: 2.4 mg (typ.)

Electrical Characteristics (Ta = 25°C)

| Characteristics | Symbol | Test Condition | Min | Тур. | Max | Unit |
|------------------------------|---------------------------|-----------------------------------------------------------------------------------|-----|------|-----|------|
| Collector cut-off current | I _{CBO} | $V_{CB} = 40 V, I_E = 0 A$ | _ | _ | 0.1 | μA |
| Emitter cut-off current | I _{EBO} | $V_{EB} = 4 \text{ V}, \text{ I}_{C} = 0 \text{ A}$ | | | 0.5 | μA |
| DC current gain | h _{FE} (Note) | $V_{CE} = 6 V, I_{C} = 1 mA$ | 40 | | 200 | |
| Reverse transfer capacitance | C _{re} | $V_{CB} = 6 V$, f = 1 MHz | _ | 0.55 | _ | pF |
| Transition frequency | f _T | $V_{CE} = 6 V, I_{C} = 1 mA$ | 260 | 550 | _ | MHz |
| Collector-base time constant | C _c ∙rbb' | $V_{CE} = 6 \text{ V}, \text{ I}_{E} = -1 \text{ mA}, \text{ f} = 30 \text{ MHz}$ | _ | _ | 20 | ps |
| Noise figure | NF | V _{CC} = 6 V, I _E = -1 mA, | _ | 2.3 | 5.0 | dB |
| Power gain | G _{pe} | f = 100 MHz, Figure 1 | 17 | 23 | | dB |

Note: hFE classification R: 40~80, O: 70~140, Y: 100~200

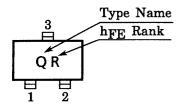
Unit: mm



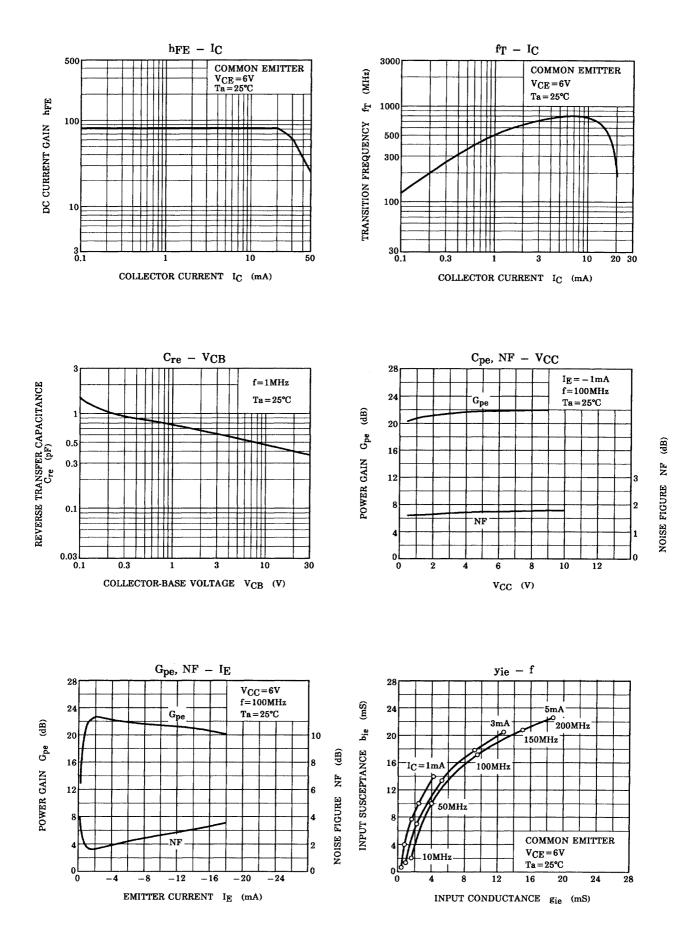
L1: 0.8 mm silver plated copper wire, 4 T, 10 mm ID, 8 mm length



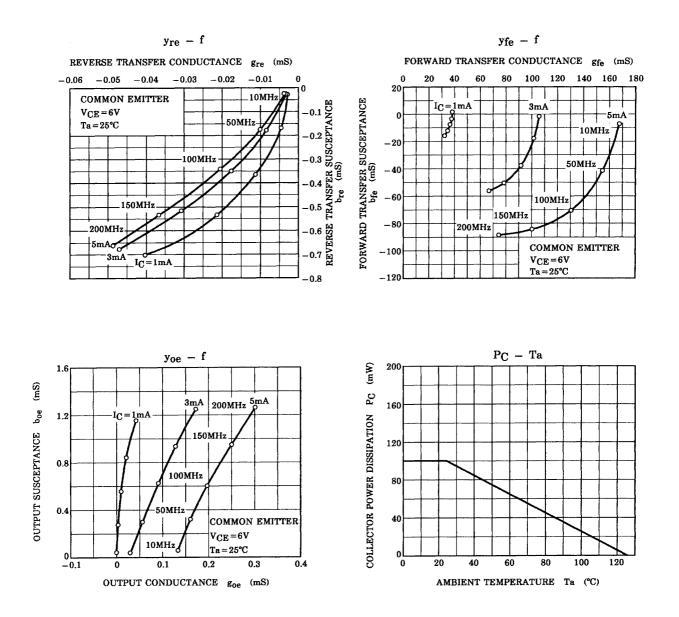
Marking



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