

(SMALL-SIGNAL TRANSISTOR)

2SC3249

FOR SMALL TYPE COLOUR TV CHROMA OUTPUT APPLICATION
SILICON NPN TRIPLE DIFFUSED TYPE

DESCRIPTION

2SC3249 is a silicon NPN triple diffused transistor designed for colour TV chroma output circuit, high voltage, switching circuit application.

FEATURE

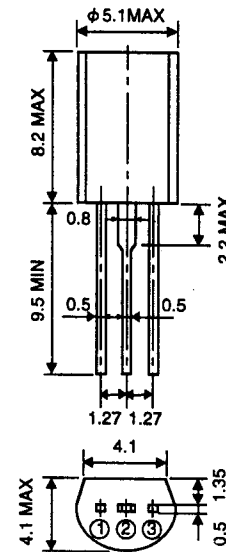
- High voltage $V_{CE0}=250V$
- High gain width product $f_r=80MHz$ typ
- Low C_{ob} $C_{ob}=3.5pF$ typ

APPLICATION

Small type colour TV chroma output circuit, high voltage switching circuit.

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

- ① : EMITTER EIAJ : —
- ② : COLLECTOR JEDEC : —
- ③ : BASE

Note) The dimension without tolerance represent central value.

MAXIMUM RATINGS ($T_a=25^{\circ}C$)

| Symbol | Parameter | Rating | Unit |
|-----------|--|-------------|-------------|
| V_{CB0} | Collector to Base voltage | 300 | V |
| V_{EB0} | Emitter to Base voltage | 5 | V |
| V_{CE0} | Collector to Emitter voltage | 250 | V |
| I_C | Collector current | 100 | mA |
| P_C | Collector dissipation($T_a=25^{\circ}C$) | 900 | mW |
| T_j | Junction temperature | +150 | $^{\circ}C$ |
| T_{stg} | Storage temperature | -55 to +150 | $^{\circ}C$ |

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

| Symbol | Parameter | Test conditions | Limits | | | Unit |
|---------------|------------------------------|--|--------|-----|-----|---------|
| | | | Min | Typ | Max | |
| $V_{(BR)CBO}$ | C to B break down voltage | $I_C=10\mu A, I_E=0$ | 300 | | | V |
| $V_{(BR)EBO}$ | E to B break down voltage | $I_E=10\mu A, I_C=0$ | 5 | | | V |
| $V_{(BR)CEO}$ | C to E break down voltage | $I_C=5mA, R_{BE}=\infty$, pulse measurement | 250 | | | V |
| I_{CBO} | Collector cut off current | $V_{CB}=150V, I_E=0$ | | | 1 | μA |
| h_{FE}^* | DC forward current gain | $V_{CE}=10V, I_C=25mA$ | 55 | | 230 | — |
| $V_{CE(sat)}$ | C to E saturation voltage | $I_C=25mA, I_B=2.5mA$ | | | 1.5 | V |
| f_r | Gain band width product | $V_{CE}=10V, I_E=-10mA, f=10MHz$ | 60 | 80 | | MHz |
| C_{ob} | Collector output capacitance | $V_{CB}=10V, I_E=0, f=1MHz$, triode measurement | | 3.5 | | pF |

* It shows hFE classification in right table.

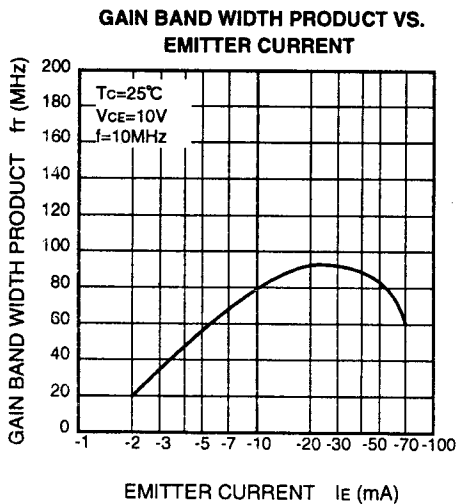
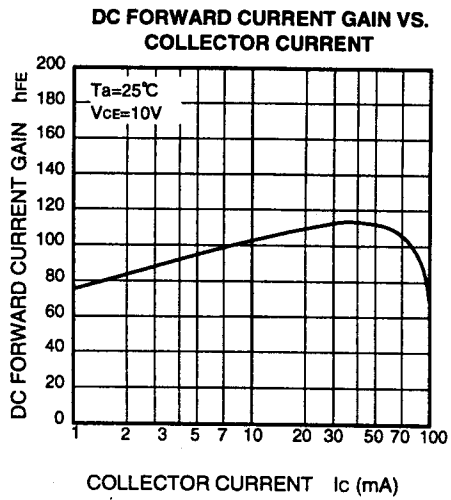
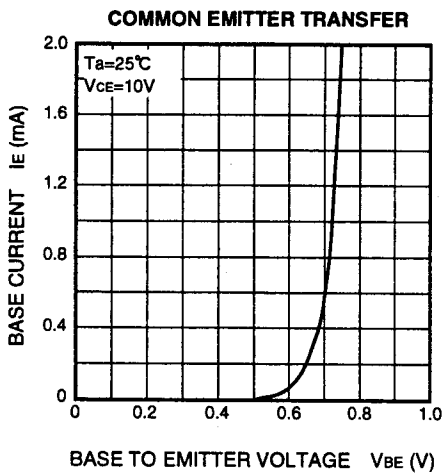
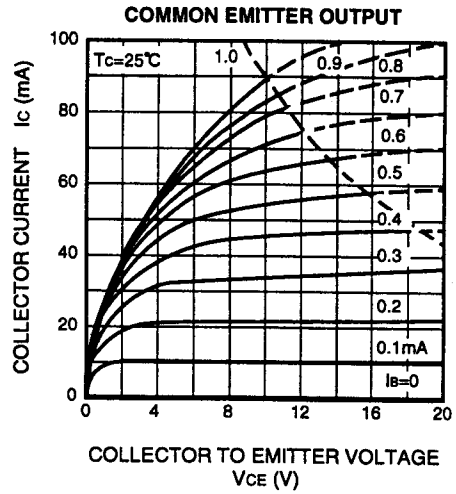
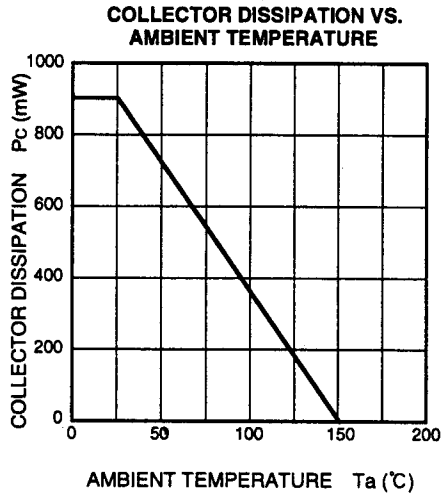
| Item | C | D | E |
|----------|-----------|-----------|------------|
| h_{FE} | 55 to 110 | 90 to 180 | 150 to 230 |

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TYPICAL CHARACTERISTICS



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