Unit in mm

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

2 S C 3 3 3 4

HIGH VOLTAGE SWITCHING APPLICATIONS

COLOR TV CHROMA OUTPUT APPLICATIONS

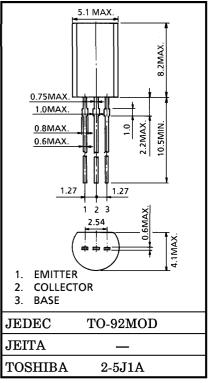
• High Voltage: V_{CEO}=250V

• Low C_{re} : 1.8pF (Max.)

• Complementary to 2SA1321

MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | | SYMBOL | RATING | UNIT | |
|-----------------------------|-------|------------------|---------|------|--|
| Collector-Base Voltage | | V _{CBO} | 250 | V | |
| Collector-Emitter Voltage | | V _{CEO} | 250 | V | |
| Emitter-Base Voltage | | $V_{\rm EBO}$ | 5 | V | |
| Collector Current | DC | $I_{\mathbf{C}}$ | 50 | mA | |
| | Pulse | ICP | 100 | | |
| Base Current | | IB | 20 | mA | |
| Collector Power Dissipation | | PC | 0.9 | W | |
| Junction Temperature | | T_{j} | 150 | °C | |
| Storage Temperature Range | | $T_{ m stg}$ | -55~150 | °C | |

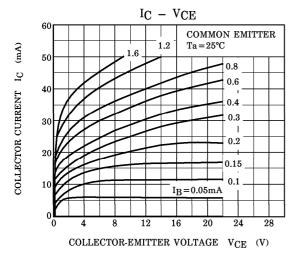


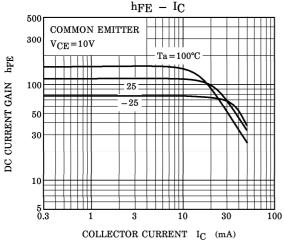
Weight: 0.36g (Typ.)

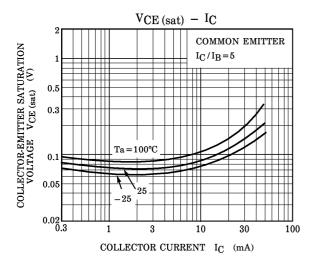
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

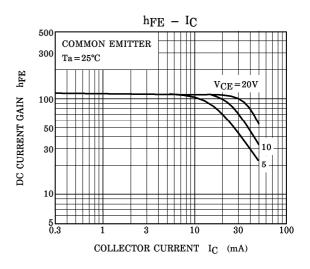
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---|-----------------------|--|------|------|------|----------------|
| Collector Cut-off Current | I _{CBO} | $V_{CB} = 200V, I_{E} = 0$ | _ | _ | 1.0 | μ A |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=5V, I_{C}=0$ | 1 | _ | 1.0 | μ A |
| Collector-Emitter Breakdown Voltage | V _(BR) CEO | $I_{\rm C}=1$ mA, $I_{\rm B}=0$ | 250 | _ | _ | V |
| DC Current Gain | $h_{	extbf{FE}}$ | $V_{CE} = 20V, I_{C} = 25mA$ | 50 | _ | _ | |
| Collector-Emitter Saturation Voltage | V _{CE} (sat) | $I_{\rm C}$ =10mA, $I_{\rm B}$ =1mA | - | _ | 1.5 | V |
| Base-Emitter Voltage | $V_{ m BE}$ | $V_{CE} = 20V, I_{C} = 25mA$ | _ | 0.75 | _ | V |
| Transition Frequency | $ m f_{T}$ | $V_{\text{CE}} = 10\text{V}, I_{\text{C}} = 10\text{mA}$ | 60 | 100 | _ | MHz |
| Reverse Transfer Capacitance | $C_{ m re}$ | $V_{CB} = 30V, I_{E} = 0, f = 1MHz$ | _ | _ | 1.8 | pF |

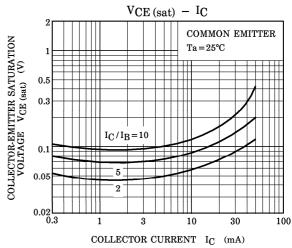
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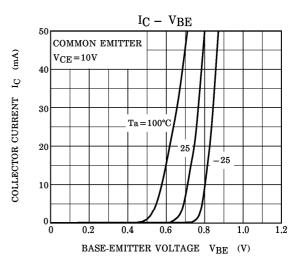




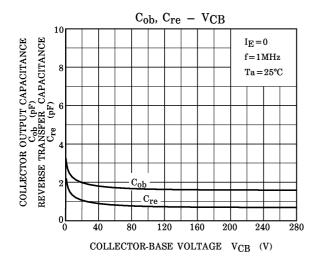


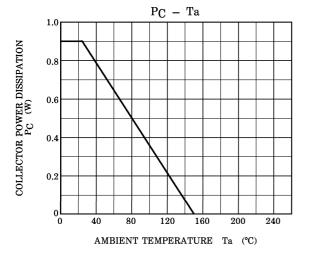


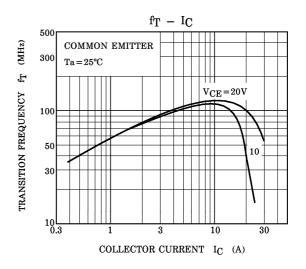


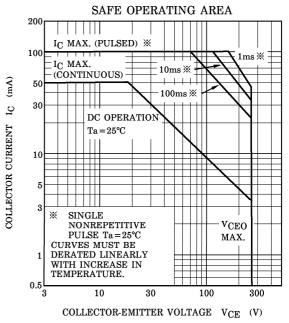


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