

Descriptions

- General purpose application
- Switching application

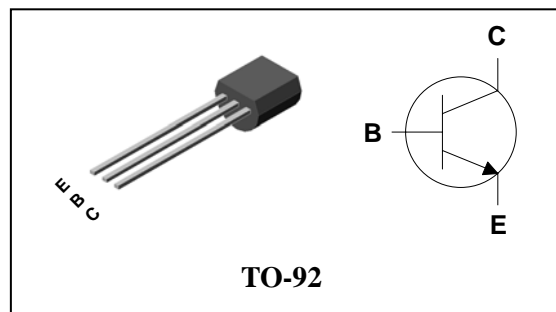
Features

- Large collector current
- Low collector saturation voltage
- Complementary pair with STN2907

Ordering Information

| Type NO. | Marking | Package Code |
|----------|---------|--------------|
| STN2222 | STN2222 | TO-92 |

PIN Connection



Absolute maximum ratings

Ta=25°C

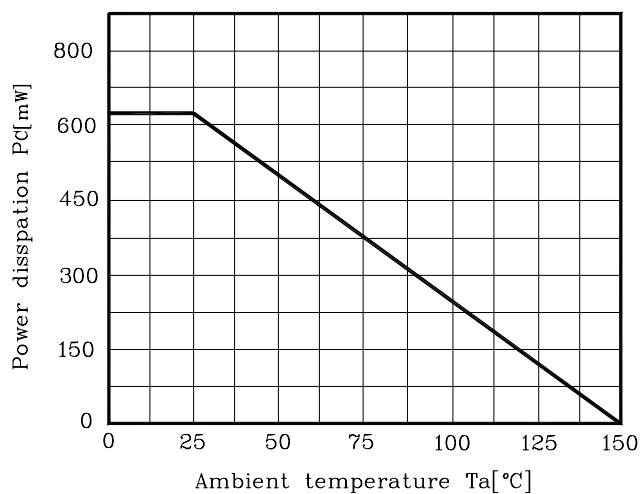
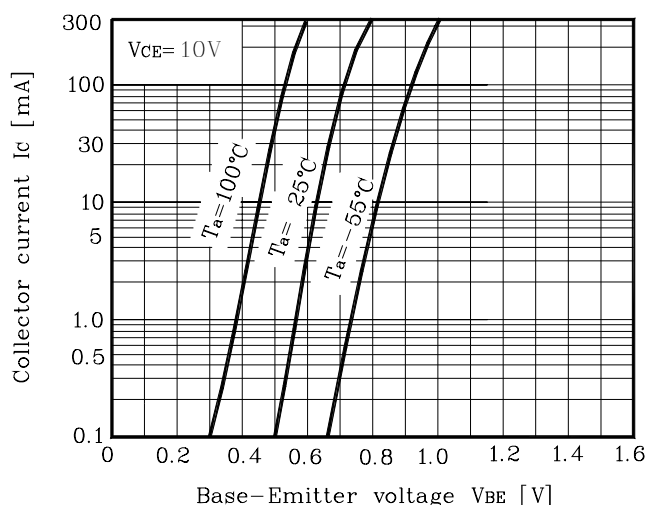
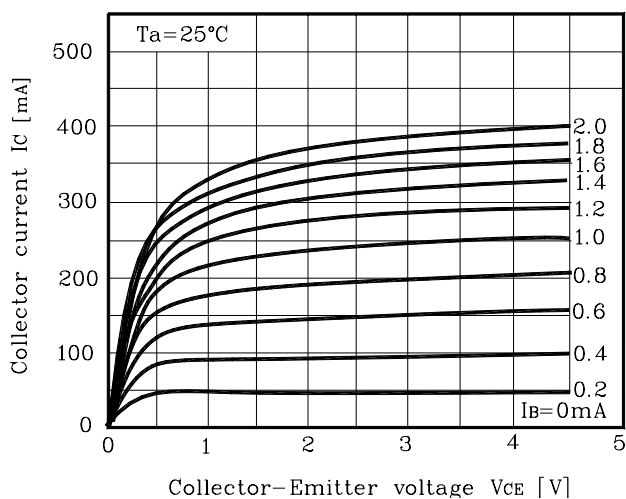
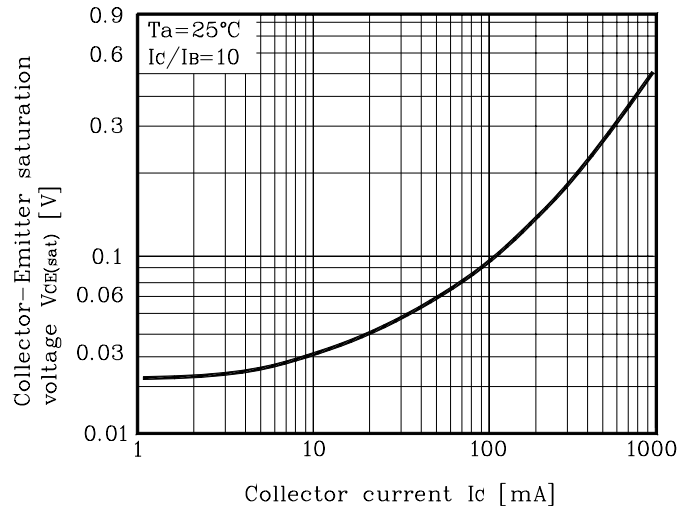
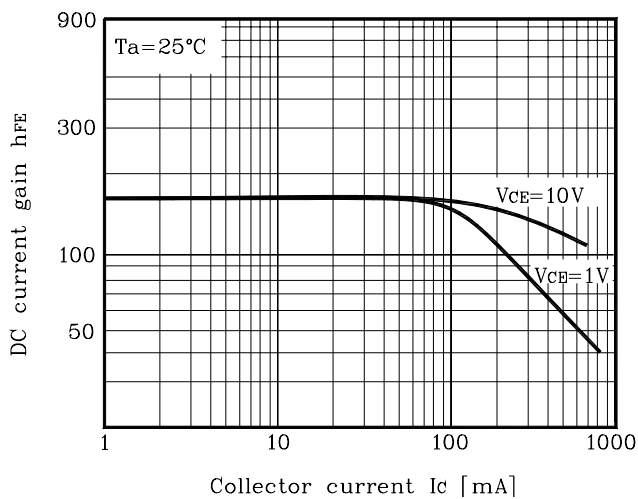
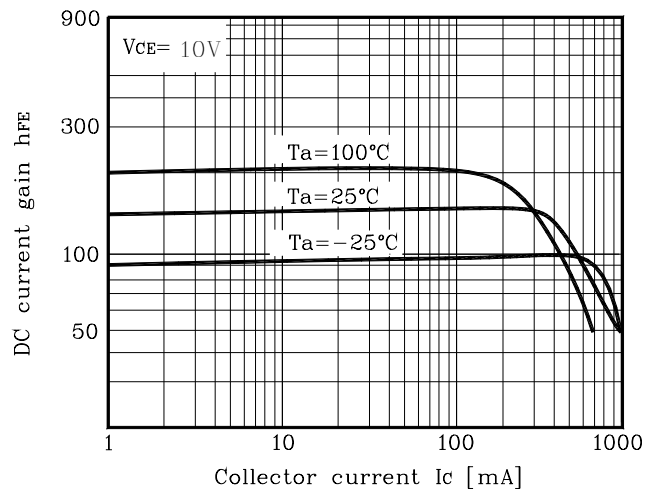
| Characteristic | Symbol | Ratings | Unit |
|---------------------------|-----------|-----------|------|
| Collector-Base voltage | V_{CBO} | 60 | V |
| Collector-Emitter voltage | V_{CEO} | 30 | V |
| Emitter-base voltage | V_{EBO} | 5 | V |
| Collector current | I_C | 600 | mA |
| Collector dissipation | P_C | 625 | mW |
| Junction temperature | T_J | 150 | °C |
| Storage temperature range | T_{stg} | -55 ~ 150 | °C |

Electrical Characteristics

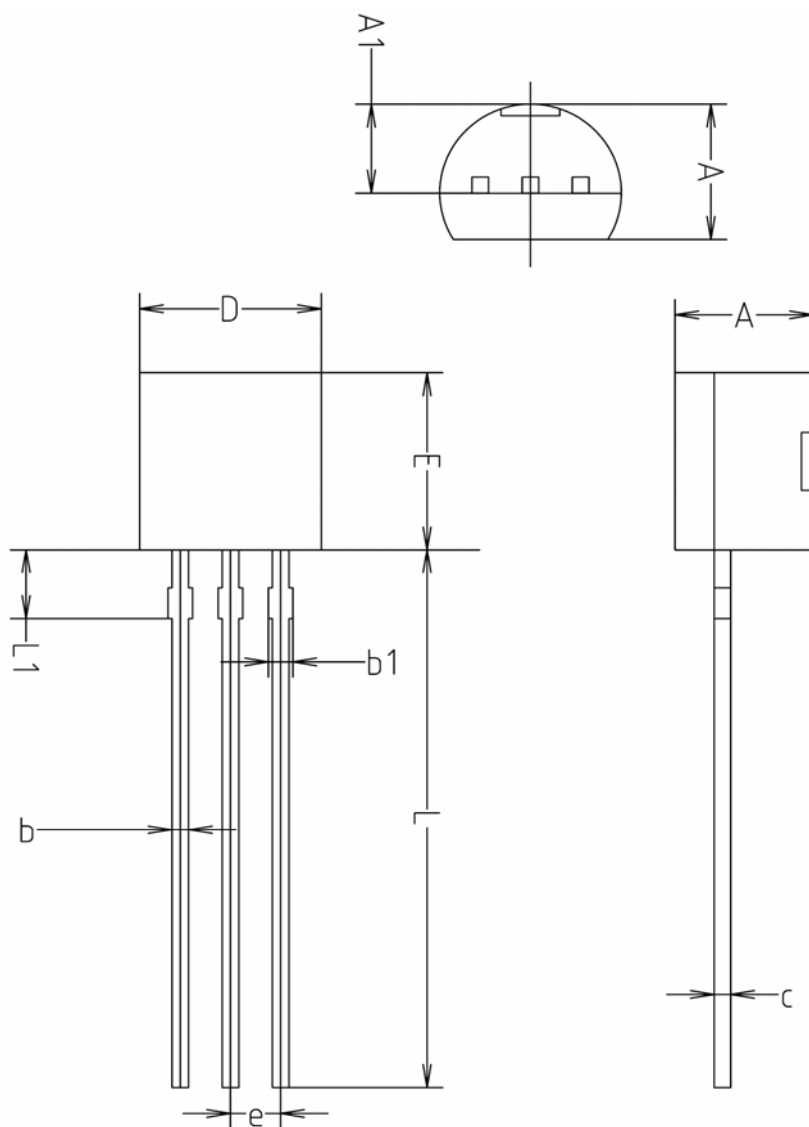
Ta=25°C

| Characteristic | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|--------------------------------------|---------------|-----------------------------|------|------|------|------|
| Collector-Base breakdown voltage | BV_{CBO} | $I_C=10\mu A, I_E=0$ | 60 | - | - | V |
| Collector-Emitter breakdown voltage | BV_{CEO} | $I_C=10mA, I_B=0$ | 30 | - | - | V |
| Emitter-Base breakdown voltage | BV_{EBO} | $I_E=10\mu A, I_C=0$ | 5 | - | - | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=60V, I_E=0$ | - | - | 10 | nA |
| DC current gain | h_{FE} | $V_{CE}=10V, I_C=10mA$ | 75 | - | - | - |
| Collector-Emitter saturation voltage | $V_{CE(sat)}$ | $I_C=150mA, I_B=15mA$ | - | - | 0.4 | V |
| Transistor frequency | f_T | $V_{CE}=20V, I_C=20mA$ | 250 | - | - | MHz |
| Collector output capacitance | C_{ob} | $V_{CB}=10V, I_E=0, f=1MHz$ | - | 6.0 | - | pF |

Electrical Characteristic Curves

Fig. 1 P_C - T_a Fig. 2 I_C - V_{BE} Fig. 3 I_C - V_{CE} Fig. 4 $V_{CE(sat)}$ - I_C Fig. 5 h_{FE} - I_C Fig. 6 h_{FE} - I_C 

Outline Dimension



| SYMBOL | MILLMETERS(mm) | | |
|--------|----------------|---------|---------|
| | MINIMUM | NOMINAL | MAXIMUM |
| A | 3.40 | 3.50 | 3.66 |
| A1 | 2.46 | 2.51 | 2.59 |
| b | 0.39 | 0.44 | 0.53 |
| b1 | 0.39 | — | 0.63 |
| c | 0.35 | 0.42 | 0.47 |
| D | 4.48 | 4.60 | 4.70 |
| E | 4.48 | 4.60 | 4.70 |
| e | 1.17 | 1.27 | 1.37 |
| L | 13.70 | 14.00 | 14.77 |
| L1 | 1.55 | 1.70 | 2.15 |

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