

Description

- Complex type bipolar transistor

Feature

- Very small package save PCB area
- Reduce quantity of parts and mounting cost
- Two 2SC5343 chips in SOT-563F package

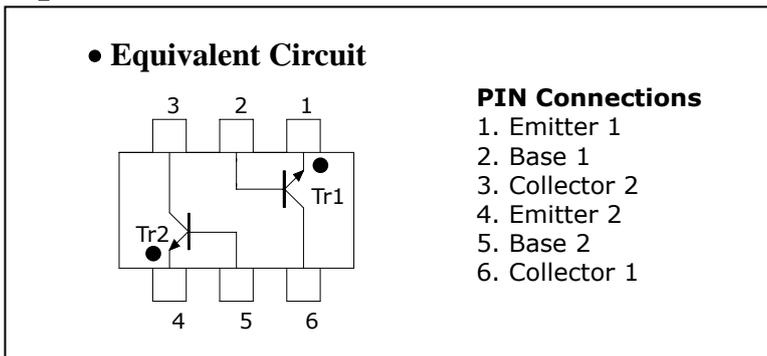


Ordering Information

| Type NO. | Marking | Package Code |
|----------|---------|--------------|
| SUT562EF | XX□ | SOT-563F |

□ : Year & Week Code

Equivalent circuit & PIN Connections



Absolute Maximum Ratings [Tr1, Tr2]

(Ta=25°C)

| Characteristic | Symbol | Rating | Unit |
|-----------------------------|-----------|---------|------|
| Collector-base voltage | V_{CBO} | 60 | V |
| Collector-emitter voltage | V_{CEO} | 50 | V |
| Emitter-base voltage | V_{EBO} | 5 | V |
| Collector current | I_C | 150 | mA |
| Collector power dissipation | P_C^* | 150 | mW |
| Junction temperature | T_J | 150 | °C |
| Storage temperature range | T_{stg} | -55~150 | °C |

※: Total rating

Electrical Characteristics [Tr1, Tr2]**(Ta=25°C)**

| Characteristic | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|--------------------------------------|---------------|-----------------------------|-------------|-------------|-------------|-------------|
| Collector-emitter breakdown voltage | BV_{CEO} | $I_C=1mA, I_B=0$ | 50 | - | - | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=60V, I_E=0$ | - | - | 0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=5V, I_C=0$ | - | - | 0.1 | μA |
| DC current gain | h_{FE} | $V_{CE}=6V, I_C=2mA$ | 120 | - | 400 | - |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=100mA, I_B=10mA$ | - | - | 0.25 | V |
| Base-emitter voltage | V_{BE} | $V_{CE}=6V, I_C=2mA$ | - | 0.65 | - | V |
| Transition frequency | f_T | $V_{CE}=10V, I_C=10mA$ | - | 200 | - | MHz |
| Collector output capacitance | C_{ob} | $V_{CB}=10V, I_E=0, f=1MHz$ | - | 2 | - | pF |

Electrical Characteristic Curves

[Tr1, Tr2]

Fig. 1 $I_C - V_{BE}$

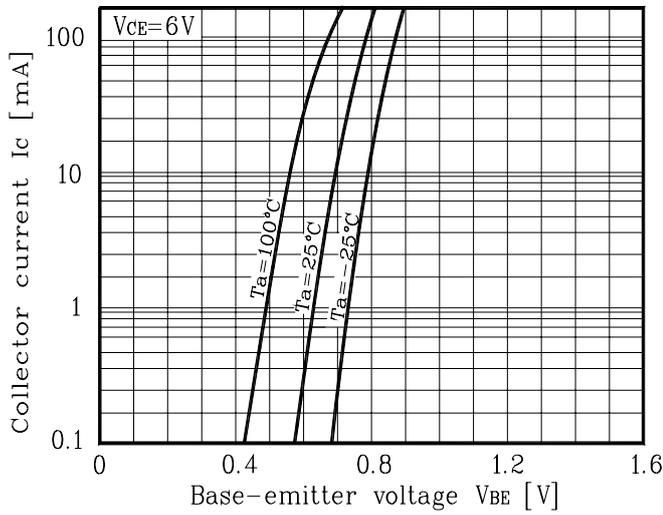


Fig. 2 $I_C - V_{CE}$

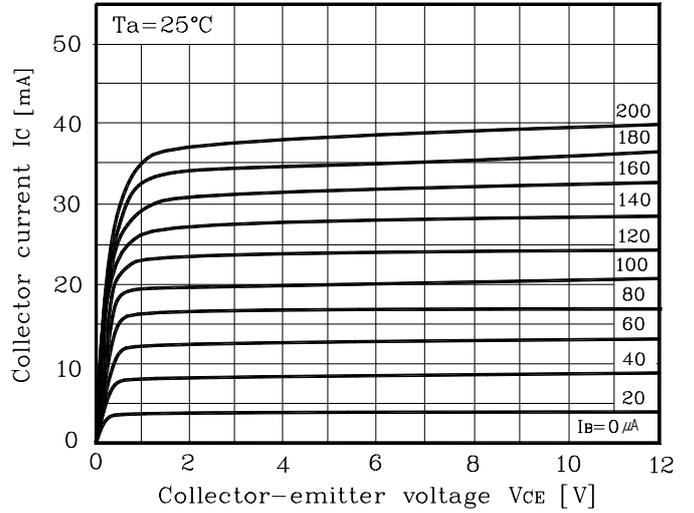


Fig. 3 $h_{FE} - I_C$

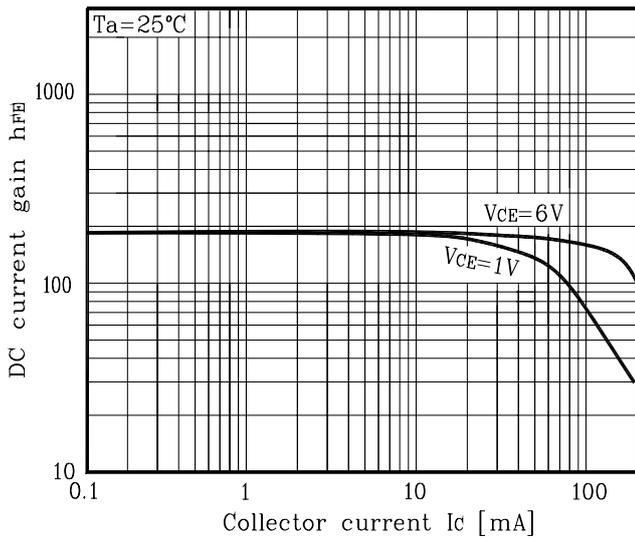


Fig. 4 $V_{CE(sat)} - I_C$

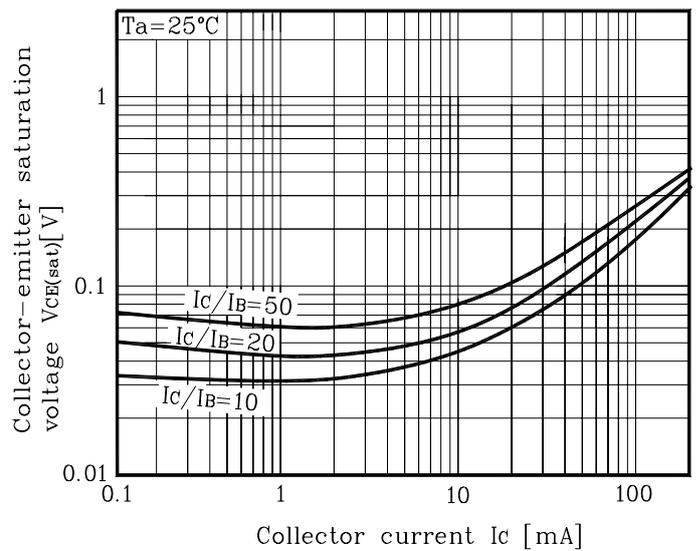
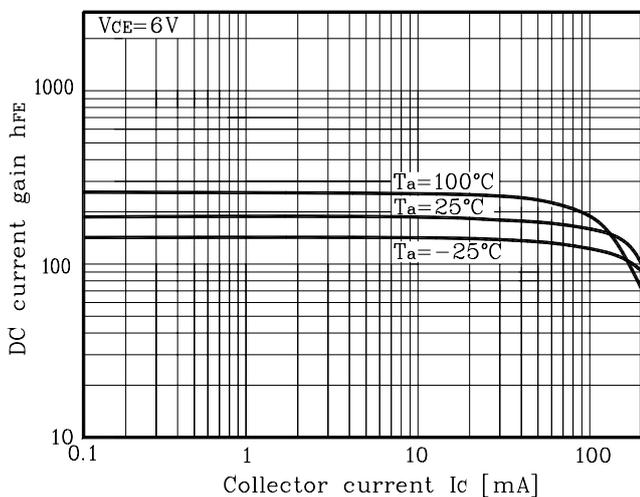
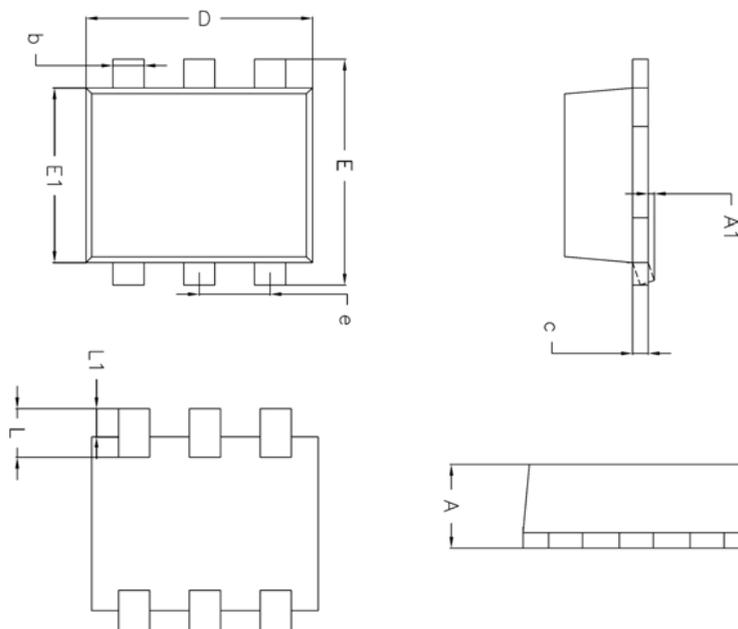


Fig. 6 $h_{FE} - I_C$

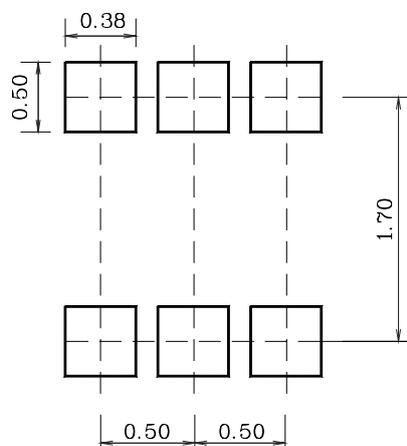


Outline Dimension



| SYMBOL | MILLIMETERS | | | NOTE |
|--------|-------------|---------|---------|------|
| | MINIMUM | NOMINAL | MAXIMUM | |
| A | 0.53 | 0.58 | 0.62 | |
| A1 | 0.00 | — | 0.10 | |
| A2 | — | — | — | |
| b | 0.15 | 0.20 | 0.30 | |
| c | 0.10 | 0.11 | 0.18 | |
| D | 1.50 | 1.60 | 1.70 | |
| E | 1.50 | 1.60 | 1.70 | |
| E1 | 1.10 | 1.20 | 1.30 | |
| e | 0.50 BSC | | | |
| L | 0.25 | 0.35 | 0.45 | |
| L1 | 0.13 | 0.20 | 0.27 | |

※ Recommend PCB solder land [Unit: mm]



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