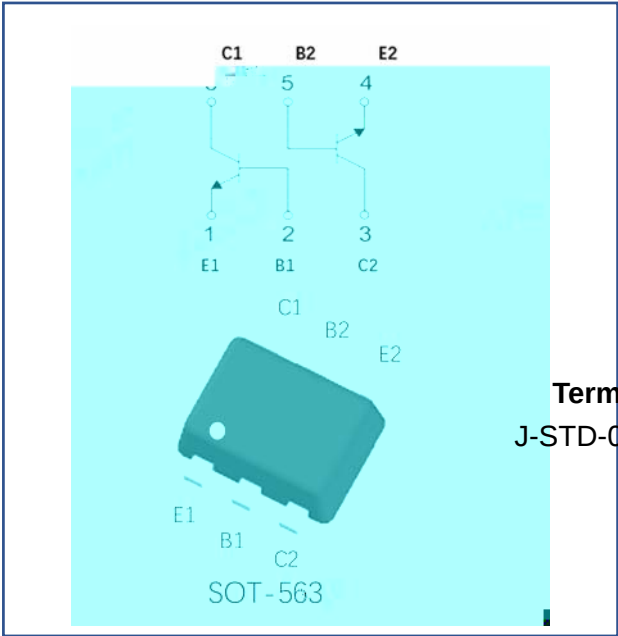




Dual NPN Small Signal Transistor



Features

- Moisture sensitivity level 1
- Halogen free and RoHS compliant
- Surface mount package ideally suited for automatic Insertion

Application ° !

S ° °

Terminals Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ Maximum Ratings (Ta=25 Unless otherwise specified)

| Item | Symbol | Unit | Conditions | Value |
|------|--------|------|------------|-------|
|------|--------|------|------------|-------|

Device marking code K4

|                      |           |    |                      |             |
|----------------------|-----------|----|----------------------|-------------|
| Emitter-base voltage | $V_{EBO}$ | V  | $I_E=10\mu A, I_C=0$ | 6           |
| Collector current    | $I_C$     | mA |                      | 100         |
| Power dissipation    | $P_D$     | mW |                      | 150         |
| Junction temperature | $T_J$     |    |                      | -55 to +150 |
| Storage temperature  | $T_{STG}$ |    |                      | -55 to +150 |



# BC847BV

**RoHS**  
COMPLIANT

| Item                                 | Symbol         | Unit | Conditions                      | Min  | Typ  | Max  |
|--------------------------------------|----------------|------|---------------------------------|------|------|------|
| Collector-base breakdown voltage     | $V_{(BR)CBO}$  | V    | $I_C=10\mu A, I_E=0$            | 50   |      |      |
| Collector-emitter breakdown voltage  | $V_{(BR)CEO}$  | V    | $I_C=10mA, I_B=0$               | 45   |      |      |
| Emitter-base breakdown voltage       | $V_{(BR)EBO}$  | V    | $I_E=10\mu A, I_C=0$            | 6    |      |      |
| Collector cut-off current            | $I_{CBO}$      | nA   | $V_{CB}=30V, I_B=0$             |      |      | 15   |
| Emitter-base cutoff current          | $I_{EBO}$      | nA   | $V_{EB}=5V, I_C=0$              |      |      | 100  |
| DC current gain                      | $h_{FE}$       |      | $V_{CE}=5V, I_C=2mA$            | 200  |      | 450  |
| Collector-emitter saturation voltage | $V_{CE(sat)1}$ | V    | $I_C=10mA, I_B=0.5mA$           |      |      | 0.1  |
|                                      | $V_{CE(sat)2}$ | V    | $I_C=100mA, I_B=5mA$            |      |      | 0.3  |
| Base-emitter saturation voltage      | $V_{BE(sat)1}$ | V    | $I_C=10mA, I_B=0.5mA$           |      | 0.7  |      |
|                                      | $V_{BE(sat)2}$ | V    | $I_C=100mA, I_B=5mA$            |      | 0.9  |      |
| Base-emitter voltage                 | $V_{BE1}$      | V    | $V_{CE}=5V, I_C=2mA$            | 0.58 | 0.66 | 0.7  |
|                                      | $V_{BE2}$      | V    | $V_{CE}=5V, I_C=10mA$           |      |      | 0.77 |
| Transition frequency                 | $f_T$          | MHz  | $V_{CE}=5V, I_C=10mA, f=100MHz$ | 100  |      |      |



Preferred P/N

code

Unit weight(g)

package(pcs)

quantity(pcs)

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