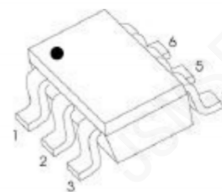


## FEATURES

Mounting possible with SOT-363 automatic mounting machines. Transistor elements are independent, eliminating interference. Mounting cost and area be cut in half.



SOT-363

Absolute maximum ratings( $T_a=25^{\circ}\text{C}$  unless otherwise specified)

| Symbol         | Parameter                                        | Value    | Unit               |
|----------------|--------------------------------------------------|----------|--------------------|
| $V_{CC}$       | Supply Voltage                                   | 50       | V                  |
| $V_{IN}$       | Input Voltage                                    | -5~+30   | V                  |
| $I_O$          | Output Current                                   | 100      | mA                 |
| $I_{C(MAX)}$   |                                                  | 100      | mA                 |
| $P_D$          | Power Dissipation                                | 150      | mW                 |
| $T_J, T_{stg}$ | Operation Junction and Storage Temperature Range | -55~+150 | $^{\circ}\text{C}$ |

ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$  unless otherwise specified)

| Parameter            | Symbol       | Test conditions              | Min  | Typ | Max  | Unit       |
|----------------------|--------------|------------------------------|------|-----|------|------------|
| Input voltage        | $V_{I(off)}$ | $V_{CC}=5V, I_O=100\mu A$    | 0.5  |     |      | V          |
|                      | $V_{I(on)}$  | $V_O=0.3V, I_O=5mA$          |      |     | 1.3  | V          |
| Output voltage       | $V_{O(on)}$  | $I_O=5mA, I_I=0.25mA$        |      |     | 0.3  | V          |
| Input current        | $I_I$        | $V_I=5V$                     |      |     | 1.8  | mA         |
| Output current       | $I_{O(off)}$ | $V_{CC}=50V, V_I=0$          |      |     | 0.5  | $\mu A$    |
| DC current gain      | $G_I$        | $V_O=5V, I_O=10mA$           | 80   |     |      |            |
| Input resistance     | $R_I$        | -                            | 3.29 |     | 6.11 | K $\Omega$ |
| Resistance ratio     | $R_2/R_1$    |                              | 8    |     | 12   |            |
| Transition frequency | $f_T$        | $V_O=10V, I_O=5mA, f=100MHz$ |      | 250 |      | MHz        |

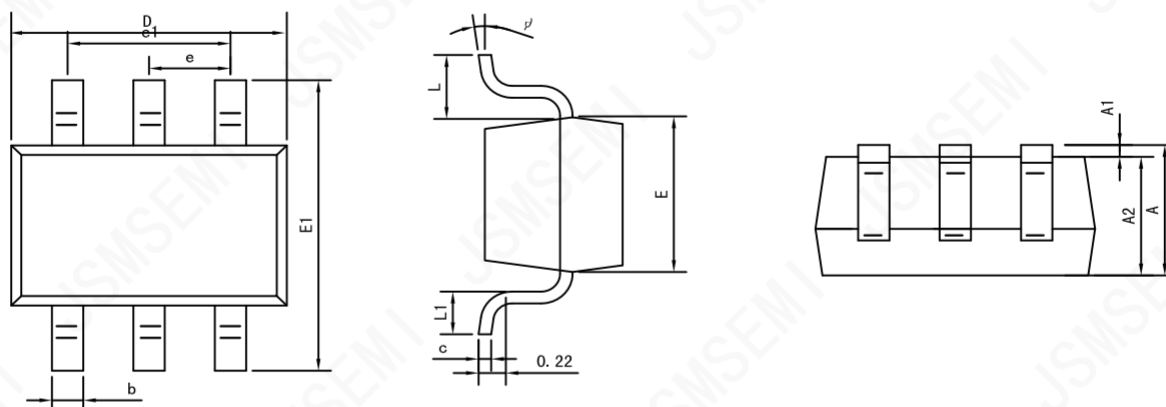
Absolute maximum ratings( $T_a=25\text{ }^{\circ}\text{C}$  unless otherwise specified)

| Symbol         | Parameter                                        | Value    | Unit               |
|----------------|--------------------------------------------------|----------|--------------------|
| $V_{CC}$       | Supply Voltage                                   | -50      | V                  |
| $V_{IN}$       | Input Voltage                                    | -30~+5   | V                  |
| $I_O$          | Output Current                                   | -100     | mA                 |
| $I_{C(MAX)}$   |                                                  | -100     | mA                 |
| $P_D$          | Power Dissipation                                | 150      | mW                 |
| $T_J, T_{stg}$ | Operation Junction and Storage Temperature Range | -55~+150 | $^{\circ}\text{C}$ |

Electrical characteristics ( $T_a=25^{\circ}\text{C}$  unless otherwise specified)

| Parameter            | Symbol       | Test conditions                | Min  | Typ | Max  | Unit       |
|----------------------|--------------|--------------------------------|------|-----|------|------------|
| Input voltage        | $V_{I(off)}$ | $V_{CC}=-5V, I_O=-100\mu A$    | -0.5 |     |      | V          |
|                      | $V_{I(on)}$  | $V_O=-0.3V, I_O=-5mA$          |      |     | -1.3 | V          |
| Output voltage       | $V_{O(on)}$  | $I_O=-5mA, I_I=-0.25mA$        |      |     | -0.3 | V          |
| Input current        | $I_I$        | $V_I=-5V$                      |      |     | -1.8 | mA         |
| Output current       | $I_{O(off)}$ | $V_{CC}=-50V, V_I=0$           |      |     | -0.5 | $\mu A$    |
| DC current gain      | $G_I$        | $V_O=-5V, I_O=-10mA$           | 80   |     |      |            |
| Input resistance     | $R_I$        | -                              | 3.29 |     | 6.11 | K $\Omega$ |
| Resistance ratio     | $R_2/ R_1$   |                                | 8    |     | 12   |            |
| Transition frequency | $f_T$        | $V_O=-10V, I_O=-5mA, f=100MHz$ |      | 250 |      | MHz        |

## SOT-363 Package outline dimensions



| Symbol | Dimension in Millimeters |       |
|--------|--------------------------|-------|
|        | Min                      | Max   |
| A      | 0.900                    | 1.100 |
| A1     | 0.000                    | 0.100 |
| A2     | 0.900                    | 1.000 |
| b      | 0.150                    | 0.350 |
| c      | 0.080                    | 0.150 |
| D      | 2.000                    | 2.200 |
| E      | 1.150                    | 1.350 |
| E1     | 2.150                    | 2.450 |
| e      | 0.650 TYP                |       |
| e1     | 1.200                    | 1.400 |
| L      | 0.525 REF                |       |
| L1     | 0.260                    | 0.460 |
| θ      | 0°                       | 8°    |

## Revision History

| Rev. | Change          | Date      |
|------|-----------------|-----------|
| V1.0 | Initial version | 6/27/2021 |
|      |                 |           |

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