



# UNISONIC TECHNOLOGIES CO., LTD

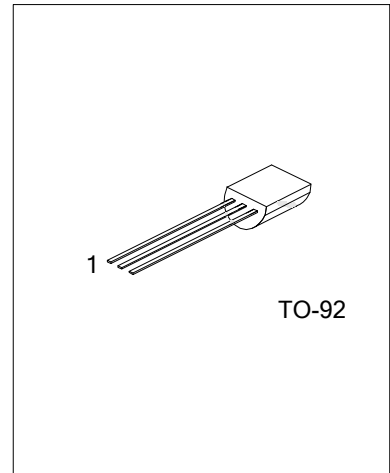
## 2SC3355

## NPN SILICON EPITAXIAL TRANSISTOR

HIGH FREQUENCY LOW  
NOISE AMPLIFIER

### FEATURES

- \* Low Noise and High Gain
- \* High Power Gain



### ORDERING INFORMATION

| Ordering Number |                | Package | Pin Assignment |   |   | Packing  |
|-----------------|----------------|---------|----------------|---|---|----------|
| Lead Free       | Halogen Free   |         | 1              | 2 | 3 |          |
| 2SC3355L-T92-B  | 2SC3355G-T92-B | TO-92   | B              | E | C | Tape Box |
| 2SC3355L-T92-K  | 2SC3355G-T92-K | TO-92   | B              | E | C | Bulk     |

Note: Pin Assignment: B: Base E: Emitter C: Collector

|   |  |
|---|--|
| <p>2SC3355L-T92-B</p> <pre>                 (1)Packing Type                 (2)Package Type                 (3)Lead Free           </pre> | <p>(1) B: Tape Box, K: Bulk</p> <p>(2) T92: TO-92</p> <p>(3) L: Lead Free, G: Halogen Free</p> |
|---|--|

### MARKING INFORMATION

| PACKAGE | MARKING   |
|---------|---|
| TO-92   | <p>UTC<br/>2SC3355</p> <p>L: Lead Free<br/>G: Halogen Free</p> <p>1 → Data Code</p> |

■ ABSOLUTE MAXIMUM RATING ( $T_A=25^\circ\text{C}$ , unless otherwise specified)

| PARAMETER                 | SYMBOL    | RATINGS    | UNIT             |
|---------------------------|-----------|------------|------------------|
| Collector-base voltage    | $V_{CBO}$ | 20         | V                |
| Collector-emitter voltage | $V_{CEO}$ | 12         | V                |
| Emitter-base voltage      | $V_{EBO}$ | 3          | V                |
| Collector current         | $I_C$     | 100        | mA               |
| Total power dissipation   | $P_T$     | 600        | mW               |
| Junction Temperature      | $T_J$     | 125        | $^\circ\text{C}$ |
| Operating Temperature     | $T_{OPR}$ | -20 ~ +85  | $^\circ\text{C}$ |
| Storage Temperature       | $T_{STG}$ | -40 ~ +150 | $^\circ\text{C}$ |

Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged.  
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

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

| PARAMETER                | SYMBOL    | TEST CONDITIONS                                      | MIN | TYP | MAX | UNIT          |
|--------------------------|-----------|--|-----|-----|-----|---------------|
| Collector Cutoff Current | $I_{CBO}$ | $V_{CB}=10\text{V}, I_E=0$                           |     |     | 1.0 | $\mu\text{A}$ |
| Emitter Cutoff Current   | $I_{EBO}$ | $V_{EB}=1\text{V}, I_C=0$                            |     |     | 1.0 | $\mu\text{A}$ |
| DC Current Gain          | $h_{FE}$  | $V_{CE}=10\text{V}, I_C=20\text{mA}$                 | 50  |     | 300 |               |
| Gain bandwidth Product   | $f_T$     | $V_{CE}=10\text{V}, I_C=20\text{mA}$                 |     | 7   |     | GHz           |
| Feed-Back Capacitance    | $C_{fe}$  | $V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$          |     |     | 1.0 | pF            |
| Noise Figure             | NF        | $V_{CE}=10\text{V}, I_C=7\text{mA}, f=1.0\text{GHz}$ |     | 1.1 |     | dB            |

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