



## UA6K

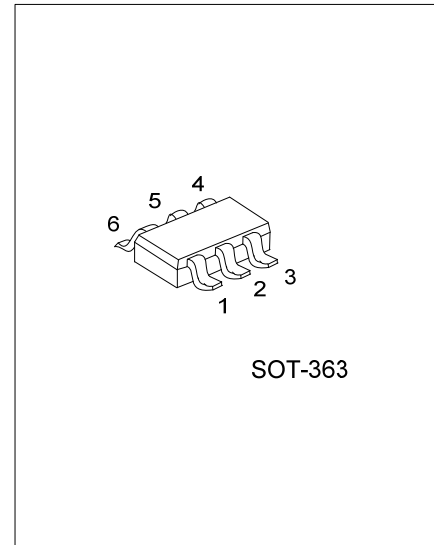
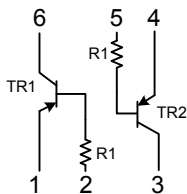
## DUAL TRANSISTOR

### GENERAL PURPOSE (DUAL DIGITAL TRANSISTOR)

#### FEATURES

- \* Two DTA144T chips in a SOT-363 package.
- \* Mounting cost and area can be cut in half.

#### EQUIVALENT CIRCUIT



SOT-363

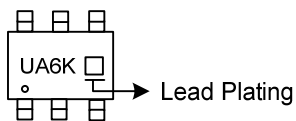
\*Pb-free plating product number: UA6KL

#### ORDERING INFORMATION

| Ordering Number |                   | Package | Pin Assignment |    |    |    |    |    | Packing   |
|-----------------|-------------------|---------|----------------|----|----|----|----|----|-----------|
| Normal          | Lead Free Plating |         | 1              | 2  | 3  | 4  | 5  | 6  |           |
| UA6K-AL6-R      | UA6KL-AL6-R       | SOT-363 | E1             | B1 | C2 | E2 | B2 | C1 | Tape Reel |

|   |   |
|---|---|
| <p>UA6KL-AL6-R</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Lead Plating</p> | <p>(1) R: Tape Reel</p> <p>(2) AL6: SOT-363</p> <p>(3) L: Lead Free Plating, Blank: Pb/Sn</p> |
|---|---|

#### MARKING



■ ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C)

| PARAMETER                   | SYMBOL           | RATINGS  | UNIT |
|-----------------------------|------------------|----------|------|
| Collector-Base Voltage      | V <sub>CB0</sub> | -50      | V    |
| Collector-Emitter Voltage   | V <sub>CEO</sub> | -50      | V    |
| Emitter-Base Voltage        | V <sub>EBO</sub> | -5       | V    |
| Collector Current           | I <sub>C</sub>   | -100     | mA   |
| Collector Power dissipation | P <sub>C</sub>   | 200      | mW   |
| Junction Temperature        | T <sub>J</sub>   | 150      | °C   |
| Storage Temperature         | T <sub>STG</sub> | -55~+150 | °C   |

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

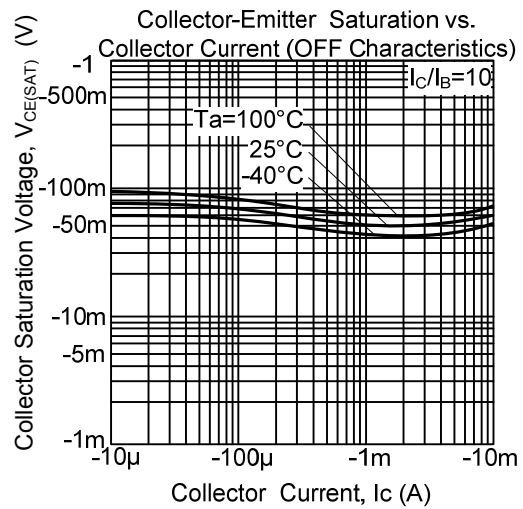
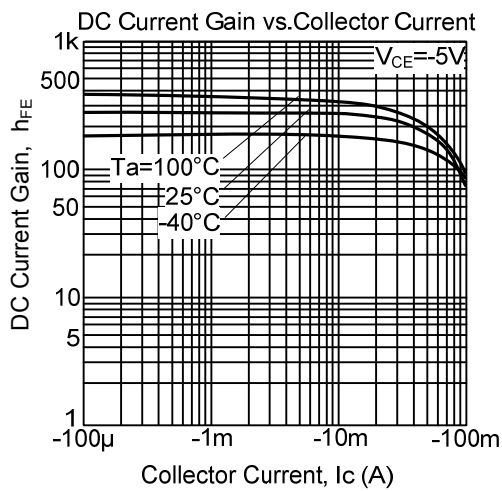
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C, unless otherwise specified)

| PARAMETER                            | SYMBOL               | TEST CONDITIONS  | MIN  | TYP | MAX  | UNIT |
|--------------------------------------|----------------------|--|------|-----|------|------|
| Collector-base breakdown voltage     | BV <sub>CB0</sub>    | I <sub>C</sub> = -50μA   | -50  |     |      | V    |
| Collector-emitter breakdown voltage  | BV <sub>CEO</sub>    | I <sub>C</sub> = -1mA  | -50  |     |      | V    |
| Emitter-base breakdown voltage       | BV <sub>EBO</sub>    | I <sub>E</sub> = -50μA   | -5   |     |      | V    |
| Collector cutoff current             | I <sub>CB0</sub>     | V <sub>CB</sub> = -50V   |      |     | -0.5 | μA   |
| Emitter cutoff current               | I <sub>EBO</sub>     | V <sub>EB</sub> = -4V  |      |     | -0.5 | μA   |
| Collector-emitter saturation voltage | V <sub>CE(SAT)</sub> | I <sub>C</sub> = -5mA, I <sub>B</sub> = -0.5mA                     |      |     | -0.3 | V    |
| DC current transfer ratio            | h <sub>FE</sub>      | V <sub>CE</sub> = -5V, I <sub>C</sub> = -1mA                       | 100  | 250 | 600  |      |
| Transition frequency                 | f <sub>T</sub>       | V <sub>CE</sub> = -10V, I <sub>E</sub> = 5mA,<br>f = 100MHz (Note) |      | 250 |      | MHz  |
| Input resistance                     | R <sub>1</sub>       |  | 32.9 | 47  | 61.1 | kΩ   |

Note: Transition frequency of the device

■ TYPICAL CHARACTERISTICS



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