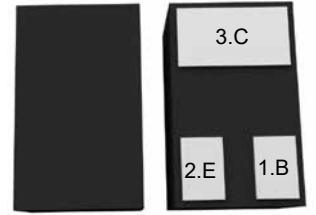


### Features

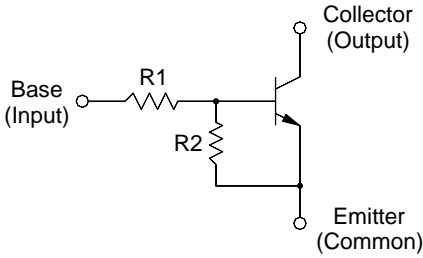
- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process

### DFN1x0.6-3L



1.Base 2.Emmitter 3.Collector

### Equivalent Circuit



### Resistor Values/Marking Code

| Type      | R1 (KΩ) | R2 (KΩ) | Marking Code |
|-----------|---------|---------|--------------|
| DTC114EDC | 10      | 10      | 6B           |

### Absolute Maximum Ratings (T<sub>A</sub>=25°C)

| Parameter                 | Symbol           | Value       | Unit |
|---------------------------|------------------|-------------|------|
| Output Voltage            | V <sub>O</sub>   | 50          | V    |
| Input Voltage             | V <sub>I</sub>   | 30,-10      | V    |
| Output Current            | I <sub>O</sub>   | 100         | mA   |
| Maximum Power Dissipation | P <sub>D</sub>   | 200         | mW   |
| Junction Temperature      | T <sub>J</sub>   | 150         | °C   |
| Storage Temperature Range | T <sub>STG</sub> | -55 to +150 | °C   |



# DTC114EDC

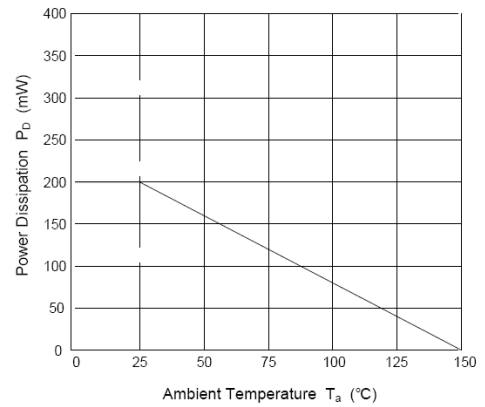
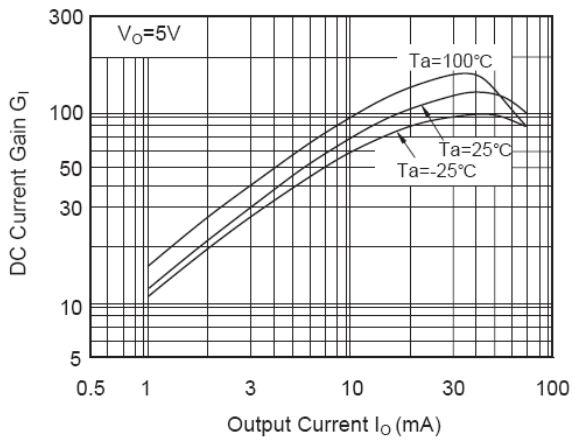
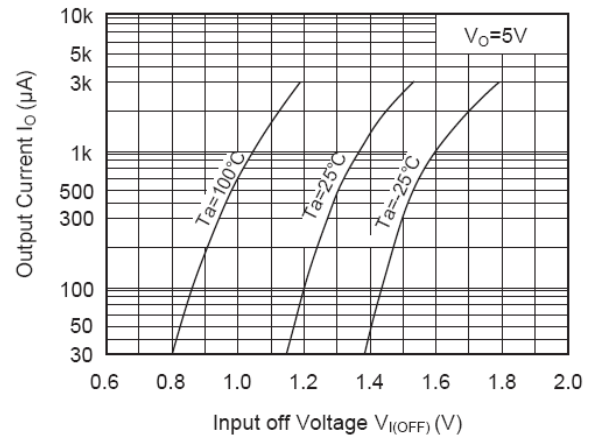
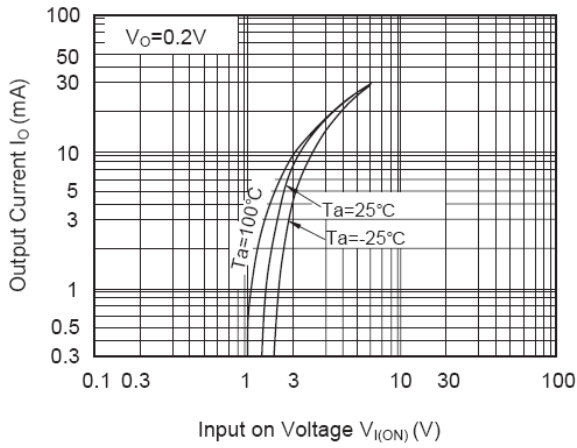
## NPN Digital Transistor

### Electrical Characteristics (T<sub>A</sub>=25°C)

| Parameter   | Symbol              | Min. | Typ. | Max. | Unit |
|---|---------------------|------|------|------|------|
| DC Current Gain<br>at V <sub>O</sub> = 5 V, I <sub>O</sub> = 10 mA        | G <sub>I</sub>      | 50   | --   | --   | --   |
| Output Cutoff Current<br>at V <sub>O</sub> = 50 V                         | I <sub>O(OFF)</sub> | --   | --   | 500  | nA   |
| Input Cutoff Current<br>at V <sub>I</sub> = 5 V                           | I <sub>I</sub>      | --   | --   | 0.88 | mA   |
| Output Voltage (ON)<br>at I <sub>O</sub> = 10 mA, I <sub>I</sub> = 0.5 mA | V <sub>O(ON)</sub>  | --   | --   | 0.3  | V    |
| Input Voltage (ON)<br>at V <sub>O</sub> = 0.2 V, I <sub>O</sub> = 5 mA    | V <sub>I(ON)</sub>  | --   | --   | 2.4  | V    |
| Input Voltage (OFF)<br>at V <sub>O</sub> = 5 V, I <sub>O</sub> = 0.1 mA   | V <sub>I(OFF)</sub> | 1    | --   | --   | V    |
| Transition Frequency<br>at V <sub>O</sub> = -10 V, I <sub>O</sub> = -5 mA | f <sub>T</sub>      | --   | 200  | --   | MHz  |



### Typical Characteristic Curves





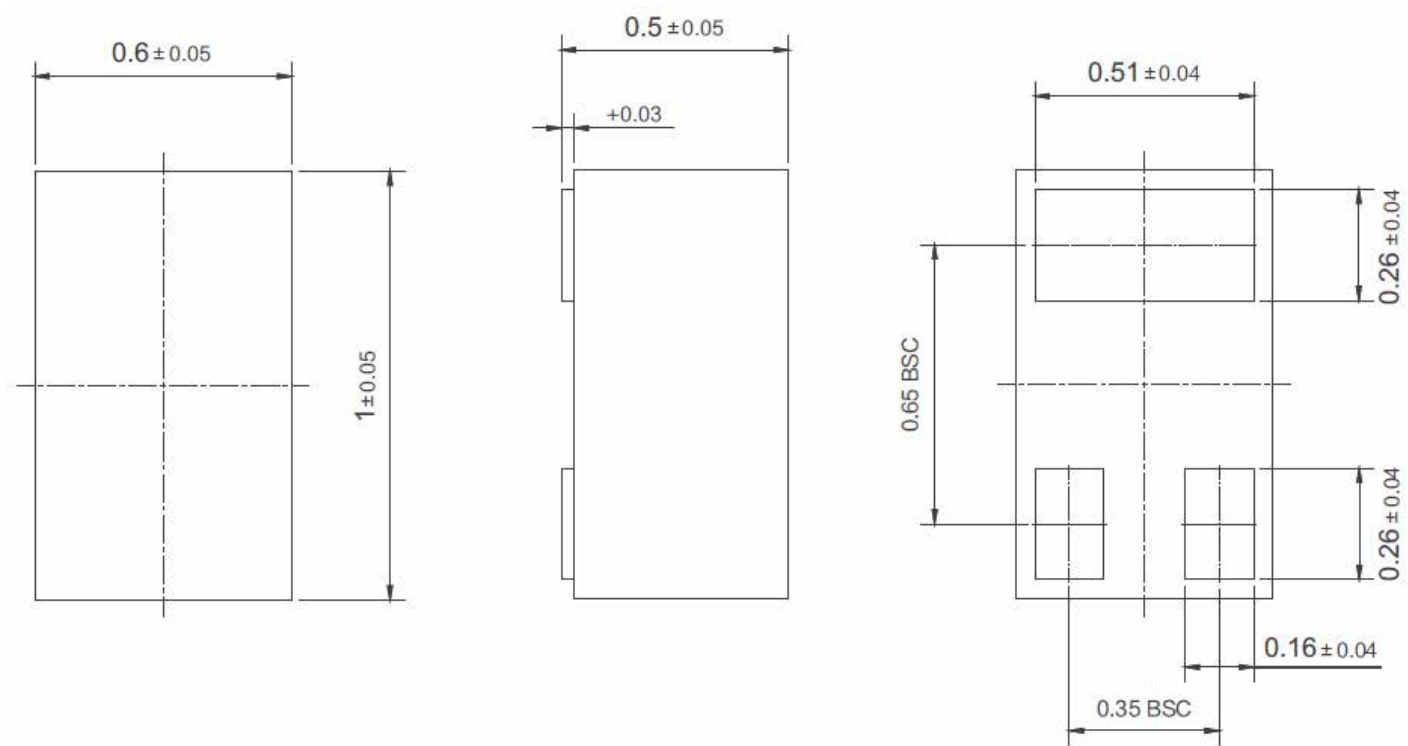
# DTC114EDC

## NPN Digital Transistor

### Package Outline

DFN1x0.6-3L-0009

Dimensions in mm



### Ordering Information

| Device    | Package     | Shipping              |
|-----------|-------------|-----------------------|
| DTC114EDC | DFN1x0.6-3L | 3,000PCS/Reel&7inches |