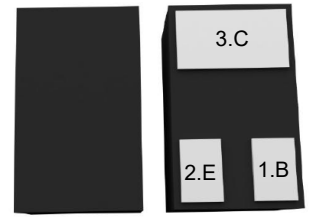


Features

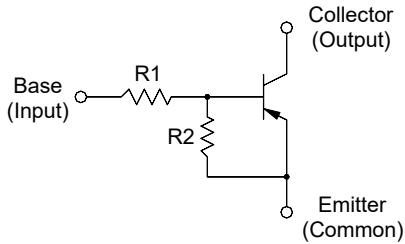
- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process

DFN1x0.6-3L



1.Base 2.Emitter 3.Collector

Equivalent Circuit



Resistor Values/Marking Code

| Type | R1 (K Ω) | R2 (K Ω) | Marking Code |
|-----------|------------------|------------------|--------------|
| DTA144EDC | 47 | 47 | 8D |

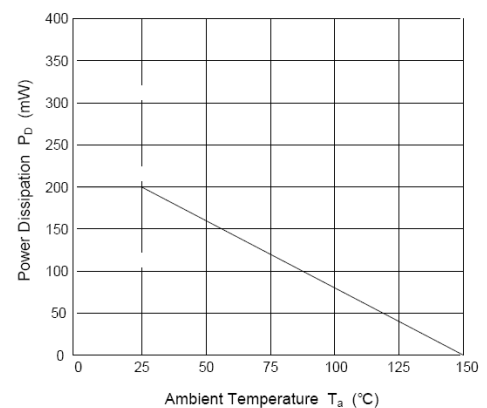
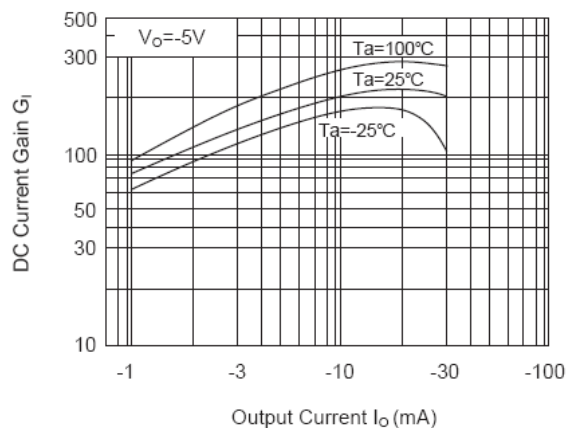
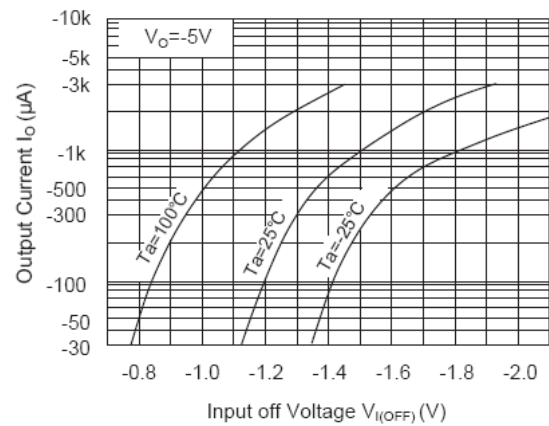
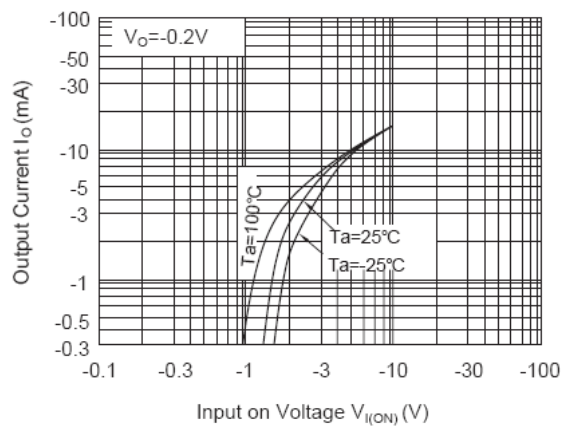
Absolute Maximum Ratings (T_A=25°C)

| Parameter | Symbol | Value | Unit |
|---------------------------|------------------|-------------|------|
| Output Voltage | -V _O | 50 | V |
| Input Voltage | -V _I | 40,-10 | V |
| Output Current | -I _O | 100 | mA |
| Maximum Power Dissipation | P _D | 200 | mW |
| Junction Temperature | T _J | 150 | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | °C |

Electrical Characteristics (T_A=25°C)

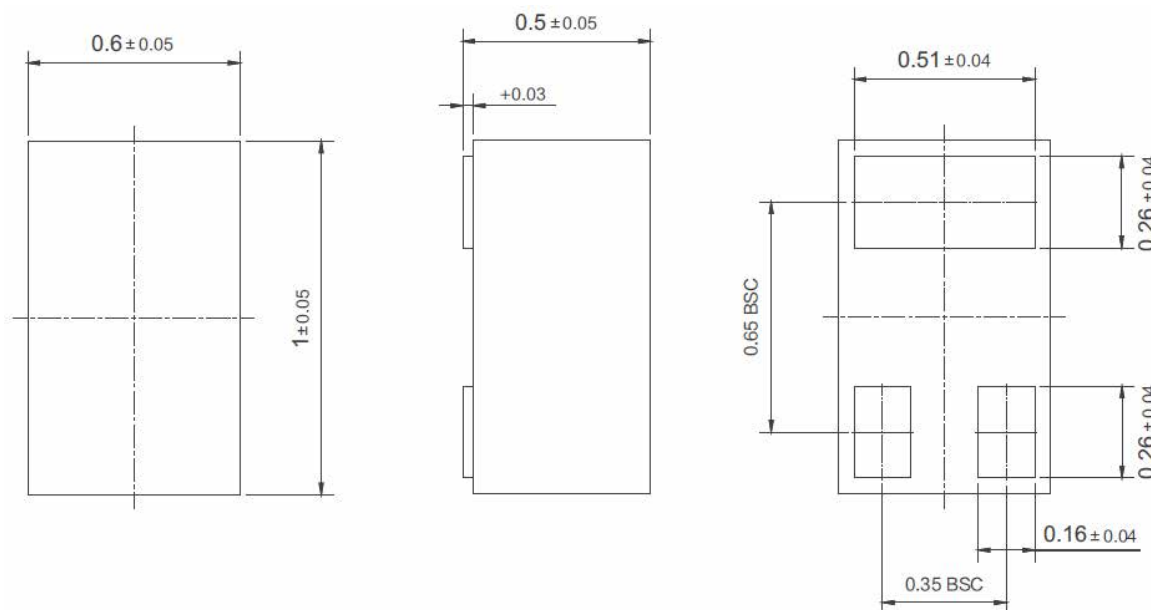
| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|---|----------------------|------|------|------|------|
| DC Current Gain at V _O = -5 V, I _O = -10 mA | G _I | 80 | -- | -- | -- |
| Output Cutoff Current at V _O = -50 V | -I _{O(OFF)} | -- | -- | 500 | nA |
| Input Current at V _I = -5 V | -I _I | -- | -- | 0.18 | mA |
| Output Voltage (ON) at I _O = -10 mA, I _I = -0.5 mA | -V _{O(ON)} | -- | -- | 0.3 | V |
| Input Voltage (ON) at V _O = -0.2 V, I _O = -5 mA | -V _{I(ON)} | -- | -- | 5 | V |
| Input Voltage (OFF) at V _O = -5 V, I _O = -0.1 mA | -V _{I(OFF)} | 1 | -- | -- | V |
| Transition Frequency at V _O = -10 V, I _O = -5 mA | f _T | -- | 200 | -- | MHz |

Typical Characteristic Curves



Package Outline

DFN1x0.6-3L-0009 Dimensions in mm




Ordering Information

| Device | Package | Shipping |
|-----------|-------------|-----------------------|
| DTA144EDC | DFN1x0.6-3L | 3,000PCS/Reel&7inches |

Contact Information

TANI website: <http://www.tanisemi.com> Email: tani@tanisemi.com

For additional information, please contact your local Sales Representative.

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Product Specification Statement

The product specification aims to provide users with a reference regarding various product parameters, performance, and usage. It presents certain aspects of the product's performance in graphical form and is intended solely for users to select product and make product comparisons, enabling users to better understand and evaluate the characteristics and advantages of the product. It does not constitute any commitment, warranty, or guarantee.

The product parameters described in the product specification are numerical values, characteristics, and functions obtained through actual testing or theoretical calculations of the product in an independent or ideal state. Due to the complexity of product applications and variations in test conditions and equipment, there may be slight fluctuations in parameter test values. TANI shall not guarantee that the actual performance of the product when installed in the customer's system or equipment will be entirely consistent with the product specification, especially concerning dynamic parameters. It is recommended that users consult with professionals for product selection and system design. Users should also thoroughly validate and assess whether the actual parameters and performance when installed in their respective systems or equipment meet their requirements or expectations. Additionally, users should exercise caution in verifying product compatibility issues, and TANI assumes no responsibility for the application of the product. TANI strives to provide accurate and up-to-date information to the best of our ability. However, due to technical, human, or other reasons, TANI cannot guarantee that the information provided in the product specification is entirely accurate and error-free. TANI shall not be held responsible for any losses or damages resulting from the use or reliance on any information in these product specifications.

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Users are advised to pay attention to the parameter limit values specified in the product specification and maintain a certain margin in design or application to ensure that the product does not exceed the parameter limit values defined in the product specification. This precaution should be taken to avoid exceeding one or more of the limit values, which may result in permanent irreversible damage to the product, ultimately affecting the quality and reliability of the system or equipment.

The design of the product is intended to meet civilian needs and is not guaranteed for use in harsh environments or precision equipment. It is not recommended for use in systems or equipment such as medical devices, aircraft, nuclear power, and similar systems, where failures in these systems or equipment could reasonably be expected to result in personal injury. TANI shall assume no responsibility for any consequences resulting from such usage.

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