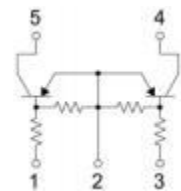
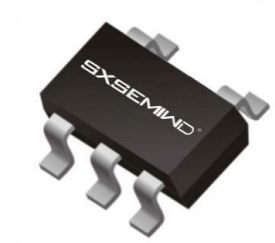


## FEATURES

Two DTA123J chips in a package

## SOT-353



Marking: A5

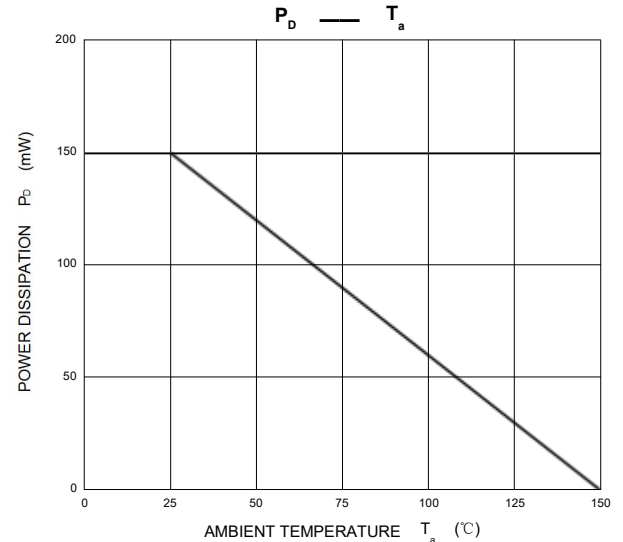
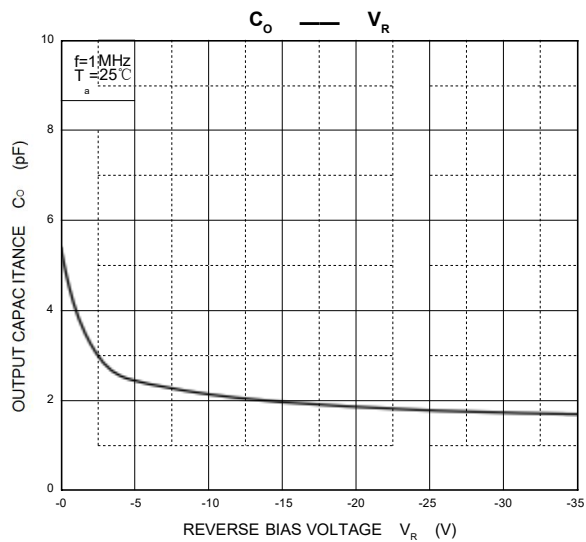
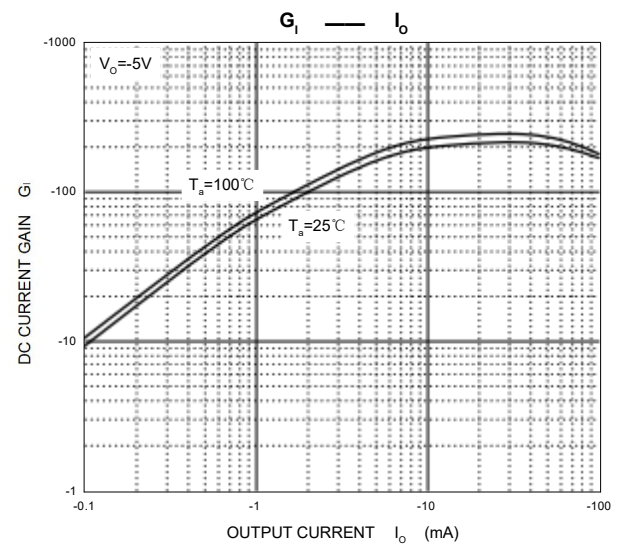
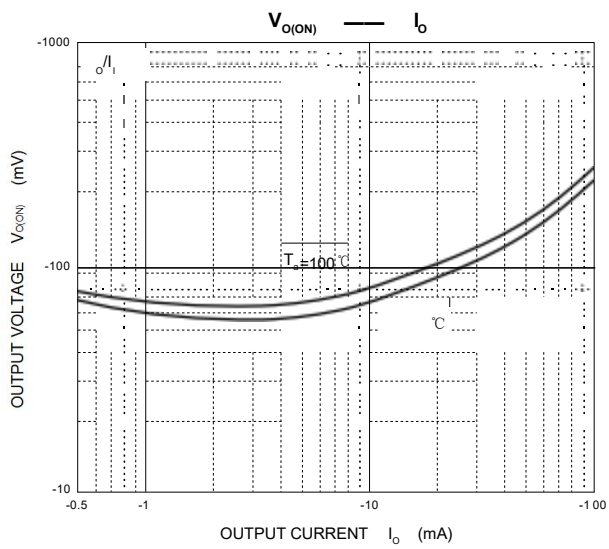
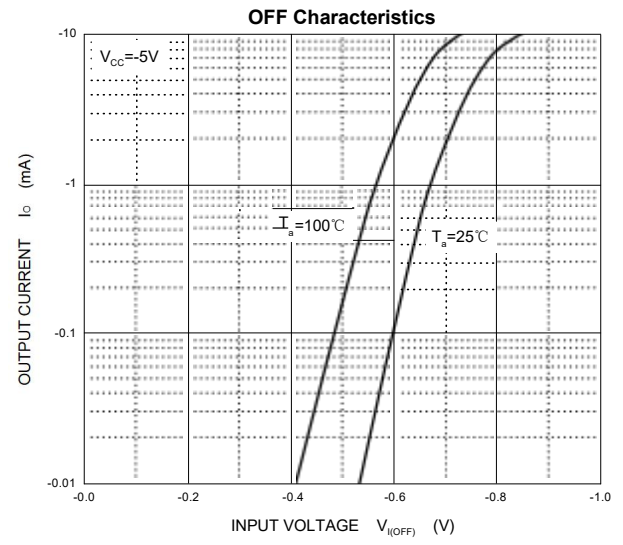
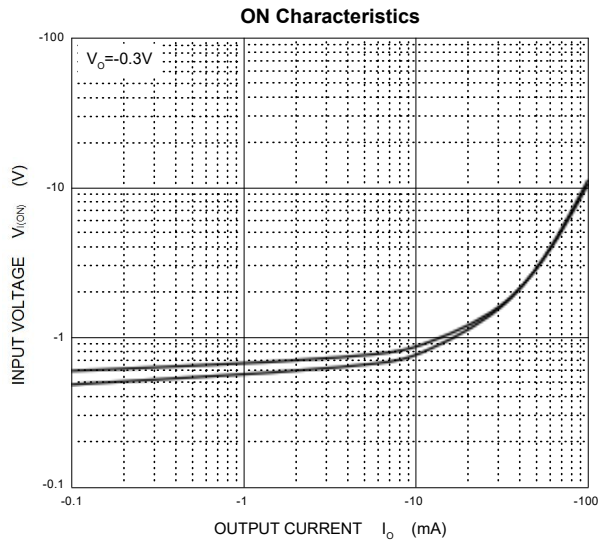
## Absolute maximum ratings ( $T_a=25^{\circ}\text{C}$ )

| Symbol         | Parameter                                        | Value     | Units              |
|----------------|--------------------------------------------------|-----------|--------------------|
| $V_{CC}$       | Supply Voltage                                   | -50       | V                  |
| $I_{C(MAX)}$   | Output Current                                   | -100      | mA                 |
| $V_i$          | Input Voltage                                    | -12 to +5 | V                  |
| $P_D$          | Power Dissipation                                | 150       | mW                 |
| $T_J, T_{stg}$ | Operation Junction and Storage Temperature Range | -55~+150  | $^{\circ}\text{C}$ |

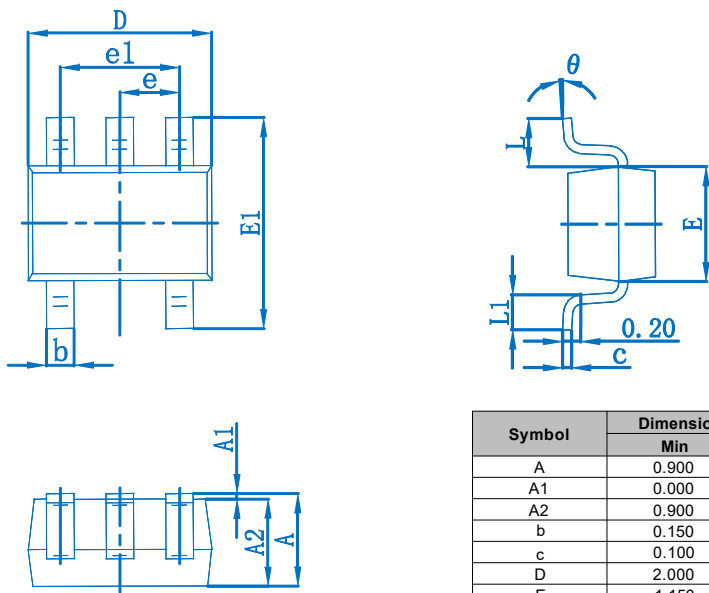
## Electrical Characteristics ( $T_a=25^{\circ}\text{C}$ )

| Parameter              | Symbol       | Test conditions                                           | Min  | Typ | Max  | Unit          |
|------------------------|--------------|-----------------------------------------------------------|------|-----|------|---------------|
| Input turn-on voltage  | $V_{i(on)}$  | $V_o=-0.3\text{V}$ , $I_o=-5\text{mA}$                    |      |     | -1.1 | V             |
| Input cut-off voltage  | $V_{i(off)}$ | $V_{CC}=-5\text{V}$ , $I_o=-100\mu\text{A}$               | -0.5 |     |      | V             |
| Output voltage         | $V_{O(on)}$  | $I_o=-5\text{mA}$ , $I_i=-0.25\text{mA}$                  |      |     | -0.3 | V             |
| Input cut-off current  | $I_i$        | $V_i=-5\text{V}$                                          |      |     | -3.6 | mA            |
| Output cut-off current | $I_{O(off)}$ | $V_{CC}=-50\text{V}$ , $V_i=0$                            |      |     | -0.5 | $\mu\text{A}$ |
| DC current gain        | $G_i$        | $V_o=-5\text{V}$ , $I_o=-10\text{mA}$                     | 80   |     |      |               |
| Transition frequency   | $f_T$        | $V_o=-10\text{V}$ , $I_o=-5\text{mA}$ , $f=100\text{MHz}$ |      | 250 |      | MHz           |
| Input resistance       | $R_1$        |                                                           | 1.54 |     | 2.86 | K $\Omega$    |
| Resistance ratio       | $R_2/R_1$    |                                                           | 17   |     | 26   |               |

## Typical Characteristics

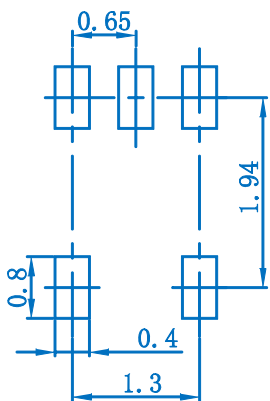


SOT-353 Package Outline Dimensions



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      | 0.900                     | 1.100 | 0.035                | 0.043 |
| A1     | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2     | 0.900                     | 1.000 | 0.035                | 0.039 |
| b      | 0.150                     | 0.350 | 0.006                | 0.014 |
| c      | 0.100                     | 0.150 | 0.004                | 0.006 |
| D      | 2.000                     | 2.200 | 0.079                | 0.087 |
| E      | 1.150                     | 1.350 | 0.045                | 0.053 |
| E1     | 2.150                     | 2.400 | 0.085                | 0.094 |
| e      | 0.650 TYP                 |       | 0.026 TYP            |       |
| e1     | 1.200                     | 1.400 | 0.047                | 0.055 |
| L      | 0.525 REF                 |       | 0.021 REF            |       |
| L1     | 0.260                     | 0.460 | 0.010                | 0.018 |
| θ      | 0°                        | 8°    | 0°                   | 8°    |

SOT-353 Suggested Pad Layout



- Note:
- 1. Controlling dimension: in millimeters.
  - 2. General tolerance: ±0.05mm.
  - 3. The pad layout is for reference purposes only.