



# IMT2A

## PNP EPITAXIAL SILICON TRANSISTOR

### GENERAL PURPOSE DUAL TRANSISTOR

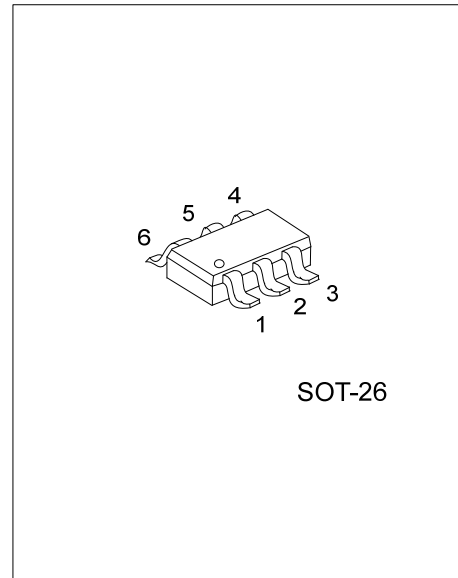
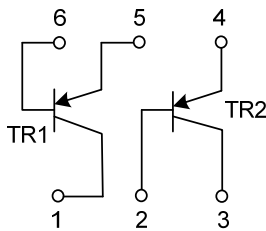
■ DESCRIPTION

The UTC **IMT2A** is a general purpose dual transistor within two chips in a SMT package.

■ FEATURES

\* Two MMBT9015 chips in an SMT package.

■ EQUIVALENT CIRCUITS

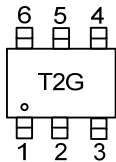


■ ORDERING INFORMATION

| Order Number | Package | Pin Description |    |    |    |    |    | Packing   |
|--------------|---------|-----------------|----|----|----|----|----|-----------|
|              |         | 1               | 2  | 3  | 4  | 5  | 6  |           |
| IMT2AG-AG6-R | SOT-26  | C1              | B2 | C2 | E2 | E1 | B1 | Tape Reel |

|  |  |
|--|--|
| <p>IMT2AG-AG6-R</p> <ul style="list-style-type: none"> <li>(1)Packing Type</li> <li>(2)Package Type</li> <li>(3)Green Package</li> </ul> | <ul style="list-style-type: none"> <li>(1) R: Tape Reel</li> <li>(2) AG6: SOT-26</li> <li>(3) G: Halogen Free and Lead Free</li> </ul> |
|--|--|

■ MARKING



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

| PARAMETER                           | SYMBOL    | RATINGS   | UNIT               |
|-------------------------------------|-----------|-----------|--------------------|
| Collector to Base Voltage           | $V_{CBO}$ | -60       | V                  |
| Collector to Emitter voltage        | $V_{CEO}$ | -50       | V                  |
| Emitter to Base Voltage             | $V_{EBO}$ | -6        | V                  |
| Collector Current                   | $I_C$     | -150      | mA                 |
| Collector Power Dissipation (total) | $P_C$     | 300(Note) | mW                 |
| Junction Temperature                | $T_J$     | 150       | $^{\circ}\text{C}$ |
| Storage Temperature                 | $T_{STG}$ | -55~ +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.

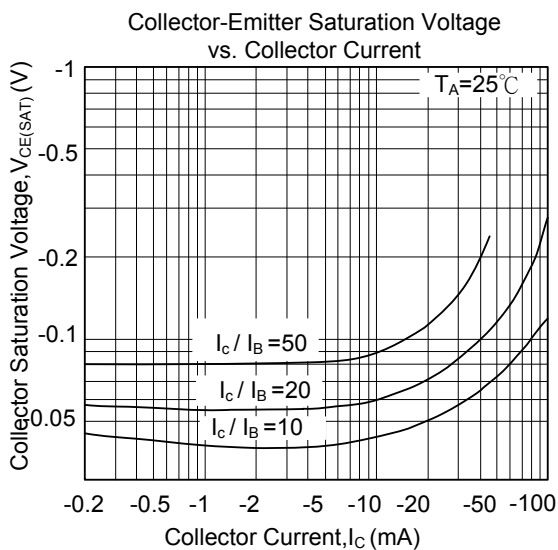
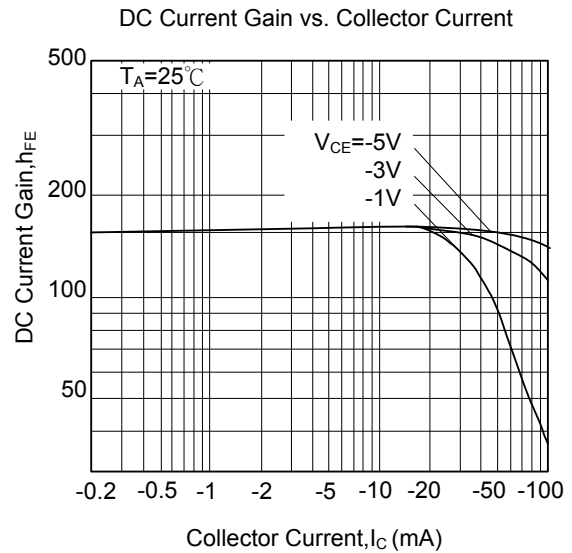
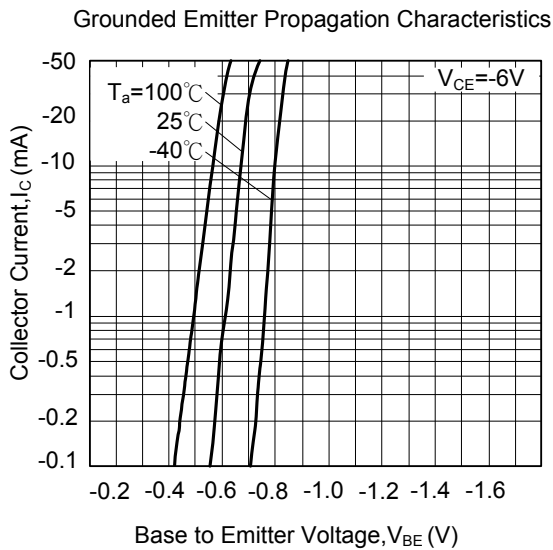
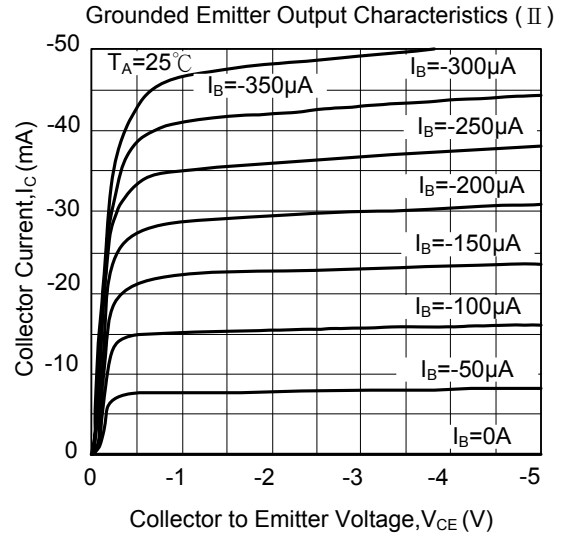
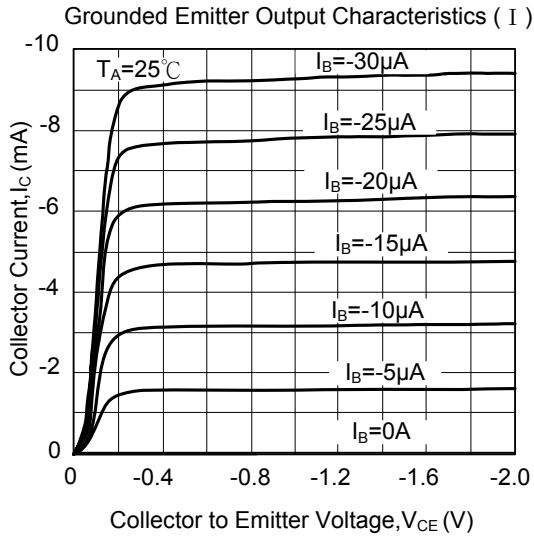
2. 200mW per element must not be exceeded.

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

| PARAMETER                               | SYMBOL        | TEST CONDITIONS  | MIN | TYP | MAX  | UNIT          |
|---|---------------|--|-----|-----|------|---------------|
| Collector to Base Breakdown Voltage     | $BV_{CBO}$    | $I_C = -50 \mu\text{A}$  | -60 |     |      | V             |
| Collector to Emitter Breakdown Voltage  | $BV_{CEO}$    | $I_C = -1\text{mA}$  | -50 |     |      | V             |
| Emitter to Base Breakdown Voltage       | $BV_{EBO}$    | $I_E = -50 \mu\text{A}$  | -6  |     |      | V             |
| Collector Cut Off Current               | $I_{CBO}$     | $V_{CB} = -60 \text{V}$  |     |     | -0.1 | $\mu\text{A}$ |
| Emitter Cut Off Current                 | $I_{EBO}$     | $V_{EB} = -6 \text{V}$   |     |     | -0.1 | $\mu\text{A}$ |
| Collector to Emitter Saturation Voltage | $V_{CE(SAT)}$ | $I_C = -50 \text{mA}, I_B = -5 \text{mA}$                          |     |     | -0.5 | V             |
| DC Forward Current Gain                 | $h_{FE}$      | $V_{CE} = -6 \text{V}, I_C = -1\text{mA}$                          | 120 |     | 560  |               |
| Transition Frequency                    | $f_T$         | $V_{CE} = -12\text{V}, I_E = 2\text{mA}, f = 100\text{MHz}$ (Note) |     | 140 |      | MHz           |
| Output Capacitance                      | $C_{OB}$      | $V_{CB} = -12\text{V}, I_E = 0\text{mA}, f = 1\text{MHz}$          |     | 4   | 5    | pF            |

Note: Transition frequency of the device.

## TYPICAL CHARACTERISTICS



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