

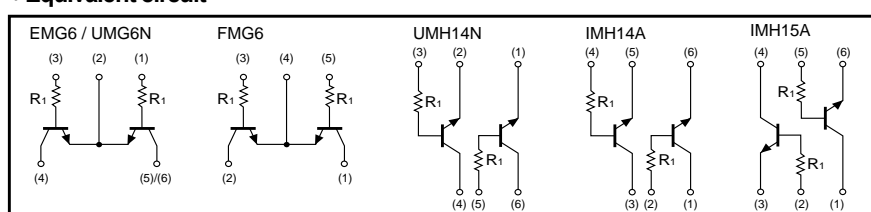
# General purpose (dual digital transistors)

## EMG6 / UMG6N / UMH14N / FMG6A / IMH14A / IMH15A

### ●Features

1) Two DTC114T chips in a EMT or UMT or SMT package.

### ●Equivalent circuit



### ●Absolute maximum ratings (Ta=25°C)

| Parameter                   | Symbol                  | Limits     | Unit |
|-----------------------------|-------------------------|------------|------|
| Collector-base voltage      | $V_{CB0}$               | 50         | V    |
| Collector-emitter voltage   | $V_{CE0}$               | 50         | V    |
| Emitter-base voltage        | $V_{EB0}$               | 5          | V    |
| Collector current           | $I_C$                   | 100        | mA   |
| Collector power dissipation | EMG6 / UMG6N / UMH14N   | 150(TOTAL) | mW   |
|                             | FMG6A / IMH14A / IMH15A | 300(TOTAL) |      |
| Junction temperature        | $T_j$                   | 150        | °C   |
| Storage temperature         | $T_{stg}$               | -55~+150   | °C   |

### ●Electrical characteristics (Ta=25°C)

| Parameter                            | Symbol        | Min. | Typ. | Max. | Unit       | Conditions                         |
|--------------------------------------|---------------|------|------|------|------------|------------------------------------|
| Collector-base breakdown voltage     | $BV_{CB0}$    | 50   | -    | -    | V          | $I_C=50\mu A$                      |
| Collector-emitter breakdown voltage  | $BV_{CE0}$    | 50   | -    | -    | V          | $I_C=1mA$                          |
| Emitter-base breakdown voltage       | $BV_{EB0}$    | 5    | -    | -    | V          | $I_E=50\mu A$                      |
| Collector cutoff current             | $I_{CBO}$     | -    | -    | 0.5  | $\mu A$    | $V_{CB}=50V$                       |
| Emitter cutoff current               | $I_{EBO}$     | -    | -    | 0.5  | $\mu A$    | $V_{EB}=4V$                        |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | -    | -    | 0.3  | V          | $I_C/I_E=5mA/0.5mA$                |
| DC current transfer ratio            | $h_{FE}$      | 100  | 250  | 600  | -          | $V_{CE}/I_C=5V/1mA$                |
| Transition frequency                 | $f_T$         | -    | 250  | -    | MHz        | $V_{CE}=10V, I_E=-5mA, f=100MHz$ * |
| Input resistance                     | $R_1$         | 32.9 | 47   | 61.1 | k $\Omega$ | -                                  |

\* Transition frequency of the device.

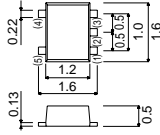
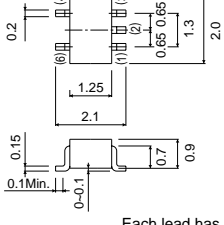
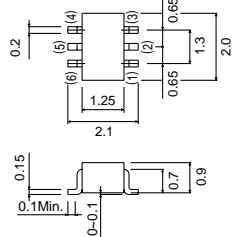
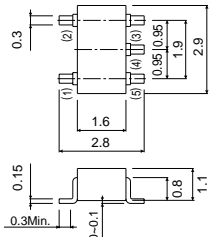
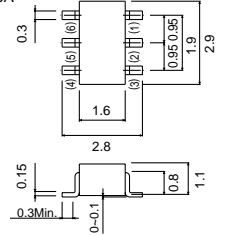
### ●Package, marking, and packaging specifications

| Type                         | EMG6 | UMG6N | UMH14N | FMG6A | IMH14A | IMH15A |
|------------------------------|------|-------|--------|-------|--------|--------|
| Package                      | EMT5 | UMT5  | UMT6   | SMT5  | SMT6   | SMT6   |
| Marking                      | G6   | G6    | H14    | G6    | H14    | H15    |
| Code                         | T2R  | TR    | TR     | T148  | T108   | T110   |
| Basic ordering unit (pieces) | 8000 | 3000  | 3000   | 3000  | 3000   | 3000   |

# EMG6 / UMG6N / UMH14N / FMG6A / IMH14A / IMH15A

## Transistors

### ●External dimensions (Units : mm)

|  |  |
|--|--|
| <p>EMG6</p>  <p>ROHM : EMT5<br/>Each lead has same dimensions</p>                               | <p>UMG6N</p>  <p>ROHM : UMT5<br/>EIAJ : SC-88A<br/>Each lead has same dimensions</p> |
| <p>UMH14N</p>  <p>ROHM : UMT6<br/>EIAJ : SC-88<br/>Each lead has same dimensions</p>            | <p>FMG6A</p>  <p>ROHM : SMT5<br/>EIAJ : SC-74A<br/>Each lead has same dimensions</p> |
| <p>IMH14A / IMH15A</p>  <p>ROHM : SMT6<br/>EIAJ : SC-74<br/>Each lead has same dimensions</p> |  |



LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

[LittleDiode.com](http://LittleDiode.com)

Looking forward to providing you with the best possible service.