

# General purpose (dual transistors)

## FMW3 / FMW4 / IMX8

●Features

- 1) Two 2SC3906K chips in an SMT package.
- 2) High breakdown voltage.

●Absolute maximum ratings (Ta = 25°C)

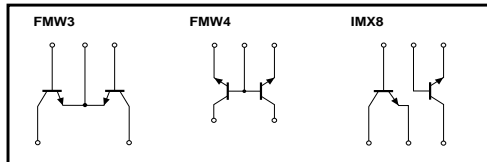
| Parameter                 | Symbol           | Limits     | Unit |
|---------------------------|------------------|------------|------|
| Collector-base voltage    | V <sub>CB0</sub> | 120        | V    |
| Collector-emitter voltage | V <sub>CE0</sub> | 120        | V    |
| Emitter-base voltage      | V <sub>EB0</sub> | 5          | V    |
| Collector current         | I <sub>c</sub>   | 50         | mA   |
| Power dissipation         | P <sub>c</sub>   | 300(TOTAL) | mW * |
| Junction temperature      | T <sub>J</sub>   | 150        | °C   |
| Storage temperature       | T <sub>stg</sub> | -55~+150   | °C   |

\* 200mW per element must not be exceeded.

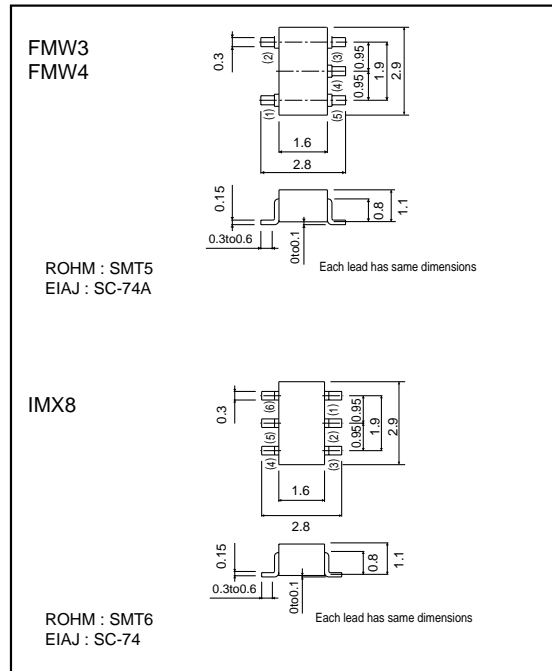
●Package, marking, and packaging specifications

| Part No.                     | FMW3 | FMW4 | IMX8 |
|------------------------------|------|------|------|
| Package                      | SMT5 | SMT5 | SMT6 |
| Marking                      | W3   | W4   | X4   |
| Code                         | T148 | T148 | T108 |
| Basic ordering unit (pieces) | 3000 | 3000 | 3000 |

●Circuit diagrams



●External dimensions (Units : mm)



●Electrical characteristics (Ta=25°C)

| Parameter                            | Symbol               | Min. | Typ. | Max. | Unit | Conditions   |
|--------------------------------------|----------------------|------|------|------|------|--|
| Collector-base breakdown voltage     | BV <sub>CB0</sub>    | 120  | -    | -    | V    | I <sub>c</sub> =50μA                                   |
| Collector-emitter breakdown voltage  | BV <sub>CE0</sub>    | 120  | -    | -    | V    | I <sub>c</sub> =1mA                                    |
| Emitter-base breakdown voltage       | BV <sub>EB0</sub>    | 5    | -    | -    | V    | I <sub>e</sub> =50μA                                   |
| Collector cutoff current             | I <sub>cbo</sub>     | -    | -    | 0.5  | μA   | V <sub>CB</sub> =100V                                  |
| Emitter cutoff current               | I <sub>ebo</sub>     | -    | -    | 0.5  | μA   | V <sub>EB</sub> =4V                                    |
| DC current transfer ratio            | h <sub>FE</sub>      | 180  | -    | 820  | -    | V <sub>CE</sub> =6V, I <sub>c</sub> =2mA               |
| Transition frequency                 | f <sub>r</sub>       | -    | 140  | -    | MHz  | V <sub>CE</sub> =-12V, I <sub>e</sub> =2mA, f=100MHz * |
| Collector-emitter saturation voltage | V <sub>CE(sat)</sub> | -    | -    | 0.5  | V    | I <sub>c</sub> /I <sub>e</sub> =10mA/1mA               |

\*Transition frequency of the device