



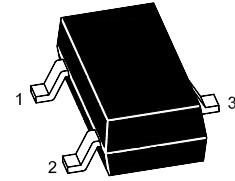
# FMMT591

## PNP Transistor

### Features

- Low equivalent on-resistance
- Be complementary with FMMT491

**SOT-23**  
**(TO-236)**



1.Base 2.Emitter 3.Collector

**Marking: 591**

### Absolute Maximum Ratings

Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter                 | Symbol     | Value      | Unit |
|---------------------------|------------|------------|------|
| Collector Base Voltage    | $-V_{CBO}$ | 80         | V    |
| Collector Emitter Voltage | $-V_{CEO}$ | 60         | V    |
| Emitter Base Voltage      | $-V_{EBO}$ | 5          | V    |
| Collector Current         | $-I_C$     | 1          | A    |
| Peak Pulse Current        | $-I_{CM}$  | 2          | A    |
| Power Dissipation         | $P_D$      | 500        | mW   |
| Junction Temperature      | $T_J$      | 150        | °C   |
| Storage Temperature Range | $T_{STG}$  | -55 to 150 | °C   |



### Electrical Characteristics

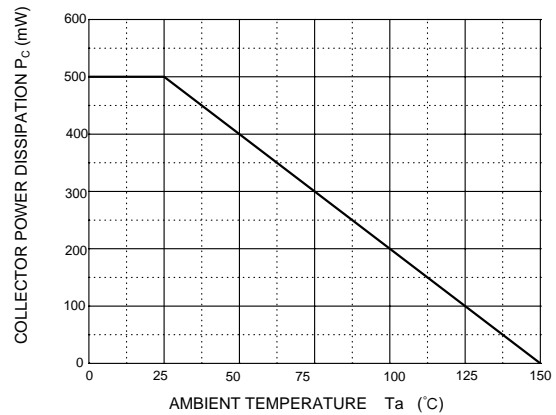
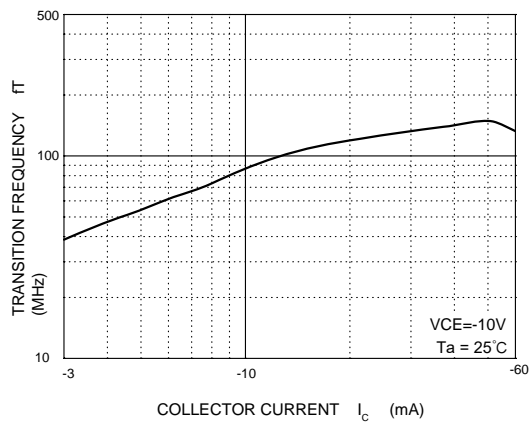
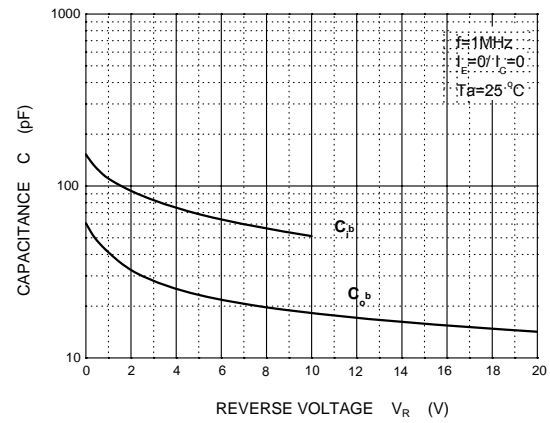
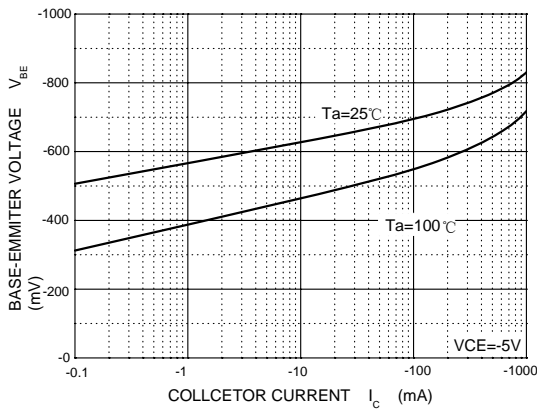
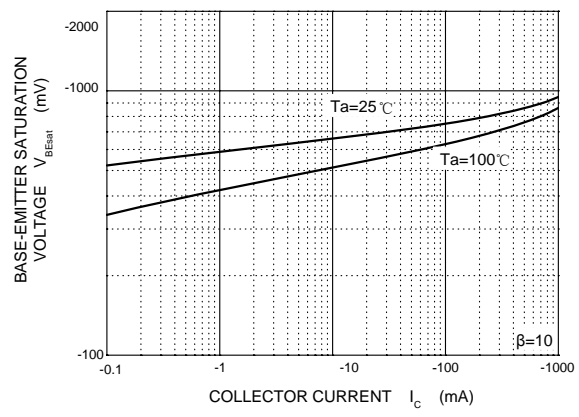
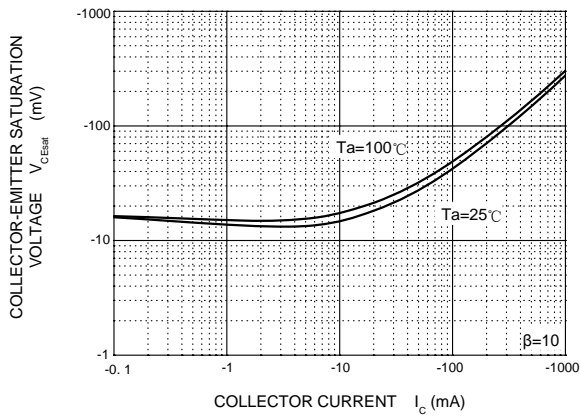
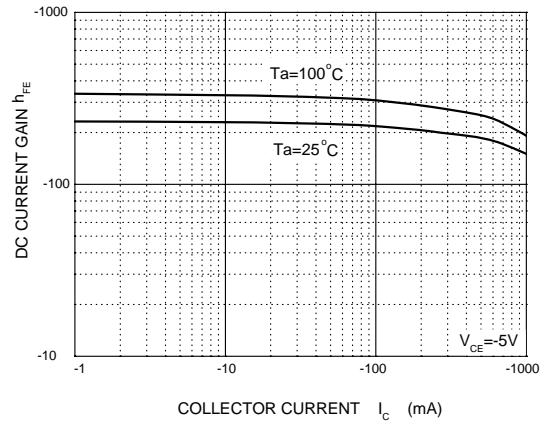
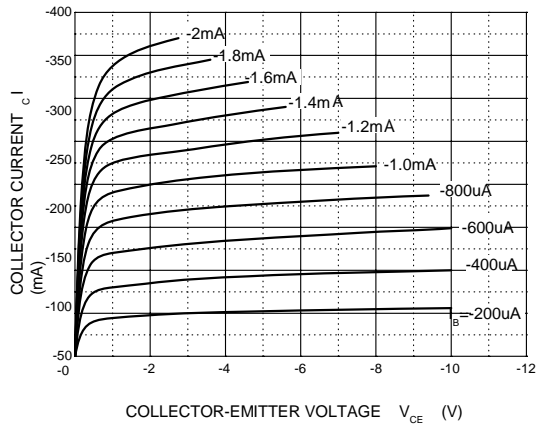
Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter  | Symbol         | Min.                   | Typ.             | Max.               | Unit |
|--|----------------|------------------------|------------------|--------------------|------|
| DC Current Gain <sup>note1</sup><br>at $-V_{CE} = 5\text{ V}$ , $-I_C = 1\text{ mA}$<br>at $-V_{CE} = 5\text{ V}$ , $-I_C = 500\text{ mA}$<br>at $-V_{CE} = 5\text{ V}$ , $-I_C = 1\text{ A}$<br>at $-V_{CE} = 5\text{ V}$ , $-I_C = 2\text{ A}$ | $H_{FE}$       | 100<br>100<br>80<br>15 | -<br>-<br>-<br>- | -<br>300<br>-<br>- | -    |
| Collector Base Cutoff Current<br>at $-V_{CB} = 60\text{ V}$  | $-I_{CBO}$     | -                      | -                | 100                | nA   |
| Emitter Base Cutoff Current<br>at $-V_{EB} = 5.6\text{ V}$   | $-I_{EBO}$     | -                      | -                | 100                | nA   |
| Collector Base Breakdown Voltage<br>at $-I_C = 100\text{ }\mu\text{A}$   | $-V_{(BR)CBO}$ | 80                     | -                | -                  | V    |
| Collector Emitter Breakdown Voltage<br>at $-I_C = 10\text{ mA}$  | $-V_{(BR)CEO}$ | 60                     | -                | -                  | V    |
| Emitter Base Breakdown Voltage<br>at $-I_E = 100\text{ }\mu\text{A}$   | $-V_{(BR)EBO}$ | 5                      | -                | -                  | V    |
| Collector Emitter Saturation Voltage <sup>note1</sup><br>at $-I_C = 500\text{ mA}$ , $-I_B = 50\text{ mA}$<br>at $-I_C = 1\text{ A}$ , $-I_B = 100\text{ mA}$  | $-V_{CE(sat)}$ | -                      | -                | 300<br>600         | mV   |
| Base Emitter Saturation Voltage <sup>note1</sup><br>at $-I_C = 1\text{ A}$ , $-I_B = 100\text{ mA}$  | $-V_{BE(sat)}$ | -                      | -                | 1.2                | V    |
| Base Emitter Voltage <sup>note1</sup><br>at $-V_{CE} = 5\text{ V}$ , $-I_C = 1\text{ A}$   | $-V_{BE(on)}$  | -                      | -                | 1                  | V    |
| Transition Frequency<br>at $-V_{CE} = 10\text{ V}$ , $-I_C = 50\text{ mA}$ , $f = 100\text{ MHz}$  | $F_T$          | 150                    | -                | -                  | MHz  |
| Collector Output Capacitance<br>at $-V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$  | $C_{ob}$       | -                      | -                | 10                 | pF   |

Note1: Measured under pulsed condition, Pulse width  $\leq 300\mu\text{s}$ , Duty cycle 2%.

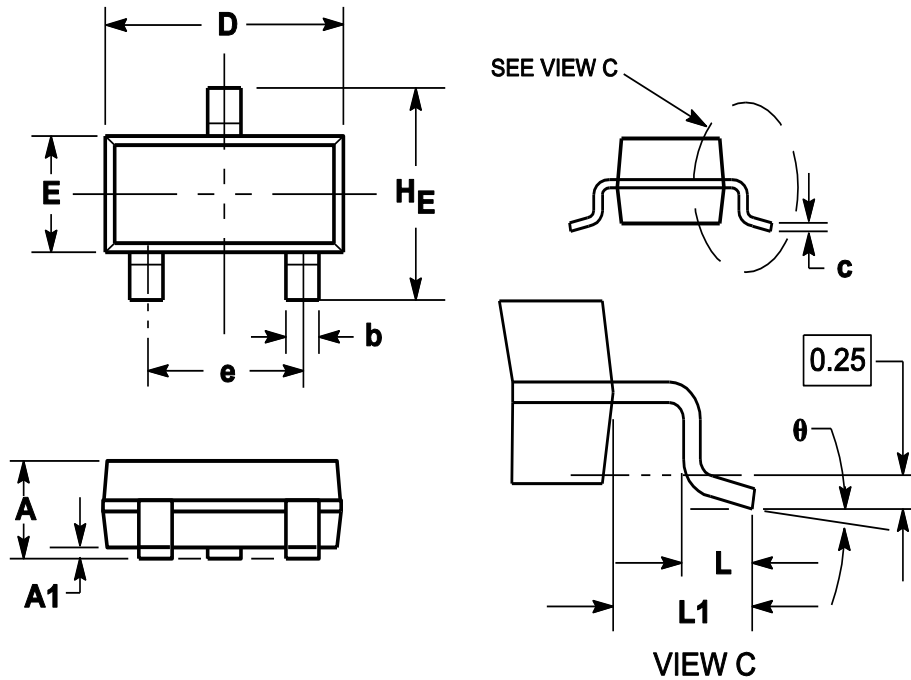


# FMMT591 PNP Transistor





### Package Outline(SOT-23)



| Symbol   | Dimensions in millimeter |       |       |
|----------|--------------------------|-------|-------|
|          | Min.                     | Typ.  | Max.  |
| A        | 0.900                    | 1.025 | 1.150 |
| A1       | 0.000                    | 0.050 | 0.100 |
| b        | 0.300                    | 0.400 | 0.500 |
| c        | 0.080                    | 0.115 | 0.150 |
| D        | 2.800                    | 2.900 | 3.000 |
| E        | 1.200                    | 1.300 | 1.400 |
| HE       | 2.250                    | 2.400 | 2.550 |
| e        | 1.800                    | 1.900 | 2.000 |
| L1       | 0.550REF                 |       |       |
| L        | 0.300                    |       | 0.500 |
| $\theta$ | 0°                       |       | 8°    |

### Ordering Information

| Device  | Package | Reel Dimension (inch) | Shipping |
|---------|---------|-----------------------|----------|
| FMMT591 | SOT-23  | 7                     | 3,000    |

单击下面可查看定价，库存，交付和生命周期等信息

[>>PJSEMI\(平晶微\)](#)