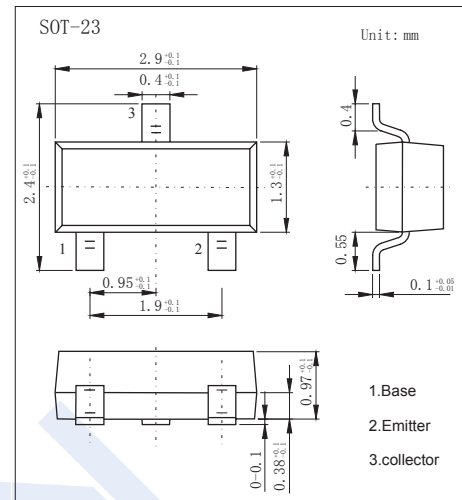


PNP Transistors

FMMT722 (KMMT722)

■ Features

- Collector Current Capability $I_C = -1.5A$
- Collector Emitter Voltage $V_{CE0} = -70V$



■ Absolute Maximum Ratings $T_a = 25^\circ C$

| Parameter | Symbol | Rating | Unit |
|--------------------------------|-----------|------------|------------|
| Collector - Base Voltage | V_{CBO} | -70 | V |
| Collector - Emitter Voltage | V_{CEO} | -70 | |
| Emitter - Base Voltage | V_{EBO} | -5 | |
| Collector Current - Continuous | I_C | -1.5 | A |
| Collector Current - Pulse | I_{CP} | -3 | |
| Base Current | I_B | -0.5 | |
| Collector Power Dissipation | P_C | 625 | mW |
| Junction Temperature | T_J | 150 | $^\circ C$ |
| Storage Temperature range | T_{stg} | -55 to 150 | |

PNP Transistors

FMMT722 (KMMT722)

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|---|-----|-----|-------|------|
| Collector- base breakdown voltage | V_{CBO} | $I_C = -100 \mu\text{A}$, $I_E = 0$ | -70 | | | V |
| Collector- emitter breakdown voltage | V_{CEO} | $I_C = -10 \text{ mA}$, $I_B = 0$ | -70 | | | |
| Emitter - base breakdown voltage | V_{EBO} | $I_E = -100 \mu\text{A}$, $I_C = 0$ | -5 | | | |
| Collector-base cut-off current | I_{CBO} | $V_{CB} = -60 \text{ V}$, $I_E = 0$ | | | -100 | nA |
| Collector- emitter cut-off current | I_{CES} | $V_{CE} = -60 \text{ V}$, $I_E = 0$ | | | -100 | |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -4 \text{ V}$, $I_C = 0$ | | | -100 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -100 \text{ mA}$, $I_B = -10 \text{ mA}$ | | | -50 | mV |
| | | $I_C = -500 \text{ mA}$, $I_B = -20 \text{ mA}$ | | | -200 | |
| | | $I_C = -1 \text{ A}$, $I_B = -100 \text{ mA}$ | | | -220 | |
| | | $I_C = -1.5 \text{ A}$, $I_B = -200 \text{ mA}$ | | | -260 | |
| Base - emitter saturation voltage | $V_{BE(sat)}$ | $I_C = -1.5 \text{ A}$, $I_B = -200 \text{ mA}$ | | | -1.05 | V |
| Base - emitter turn-on voltage | $V_{BE(on)}$ | $V_{CE} = -5 \text{ V}$, $I_C = -1.5 \text{ A}$ | | | -1 | |
| DC current gain | hFE | $V_{CE} = -5 \text{ V}$, $I_C = -10 \text{ mA}$ | 300 | | | |
| | | $V_{CE} = -5 \text{ V}$, $I_C = -100 \text{ mA}$ | 300 | | | |
| | | $V_{CE} = -5 \text{ V}$, $I_C = -1 \text{ A}$ | 175 | | | |
| | | $V_{CE} = -5 \text{ V}$, $I_C = -1.5 \text{ A}$ | 40 | | | |
| | | $V_{CE} = -5 \text{ V}$, $I_C = -3 \text{ A}$ | | 10 | | |
| Turn-on time | t_{on} | $V_{CC} = -50 \text{ V}$, $I_C = -0.5 \text{ A}$ | | 40 | | ns |
| Turn-off time | t_{off} | $I_{B1} = -I_{B2} = 50 \text{ mA}$ | | 700 | | |
| Collector output capacitance | C_{ob} | $V_{CB} = -10 \text{ V}$, $f = 1 \text{ MHz}$ | | | 20 | pF |
| Transition frequency | f_T | $V_{CE} = -10 \text{ V}$, $I_C = -50 \text{ mA}$, $f = 100 \text{ MHz}$ | 150 | | | MHz |

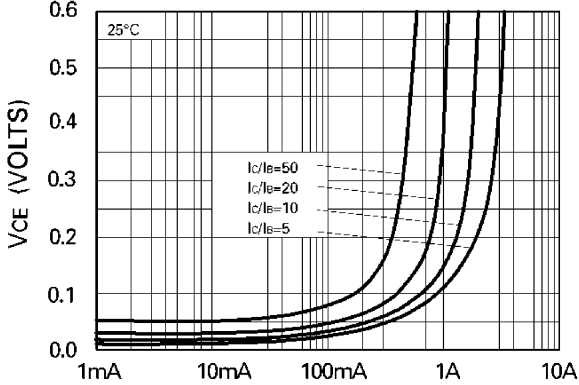
■ Marking

| | |
|---------|-----|
| Marking | 722 |
|---------|-----|

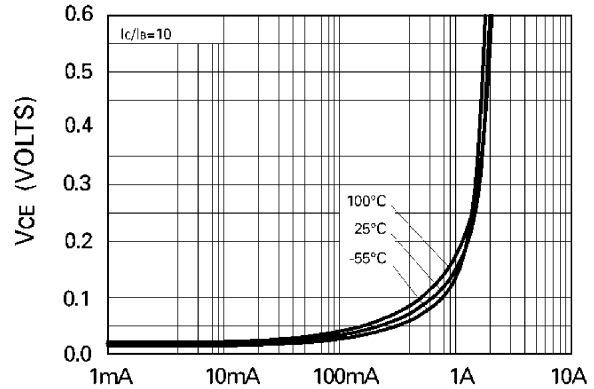
PNP Transistors

FMMT722 (KMMT722)

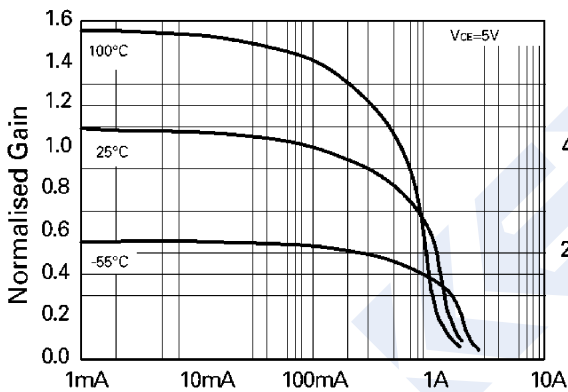
■ Typical Characteristics



Collector Current
V_{BE(SAT)} vs I_C

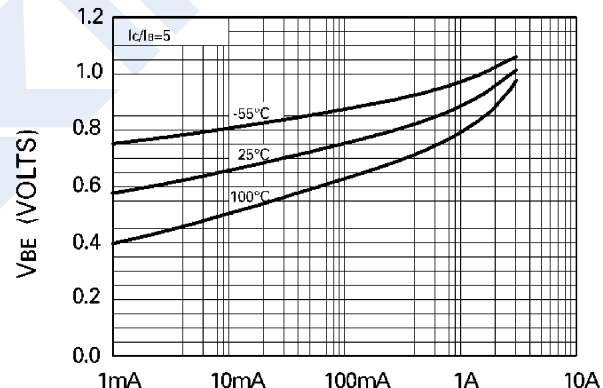


Collector Current
V_{CE(SAT)} vs I_C

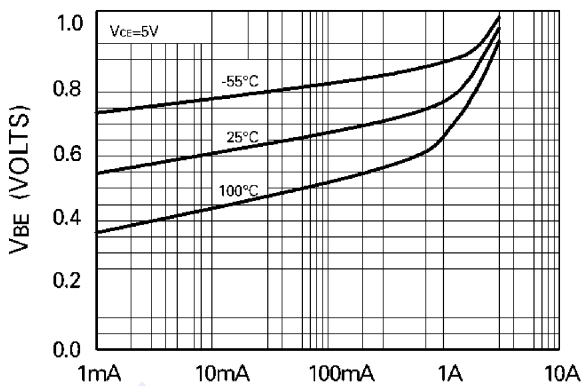


Collector Current
hFE vs I_C

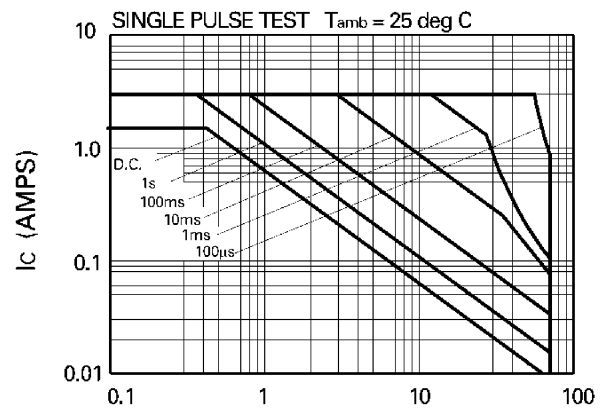
Typical Gain (hFE)



Collector Current
V_{BE(SAT)} vs I_C



Collector Current
V_{BE(ON)} vs I_C

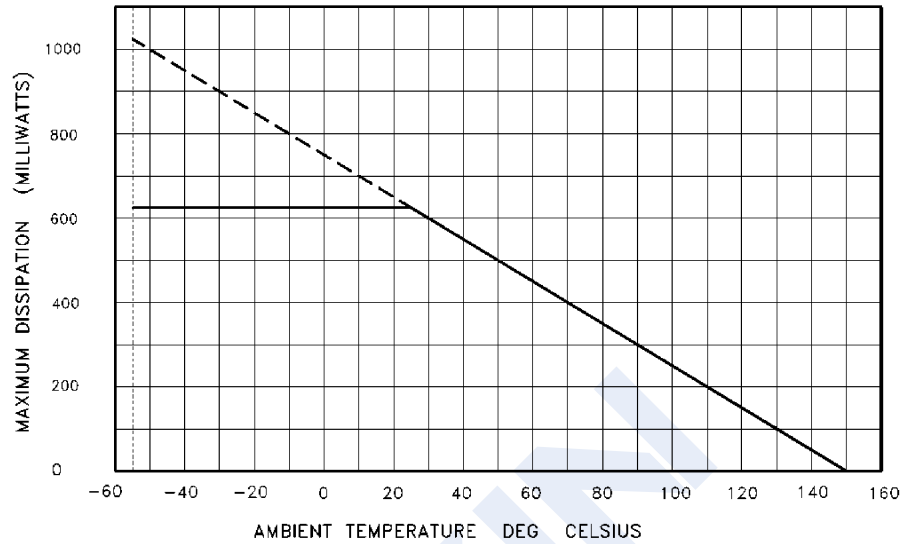


V_{CE} (VOLTS)
Safe Operating Area

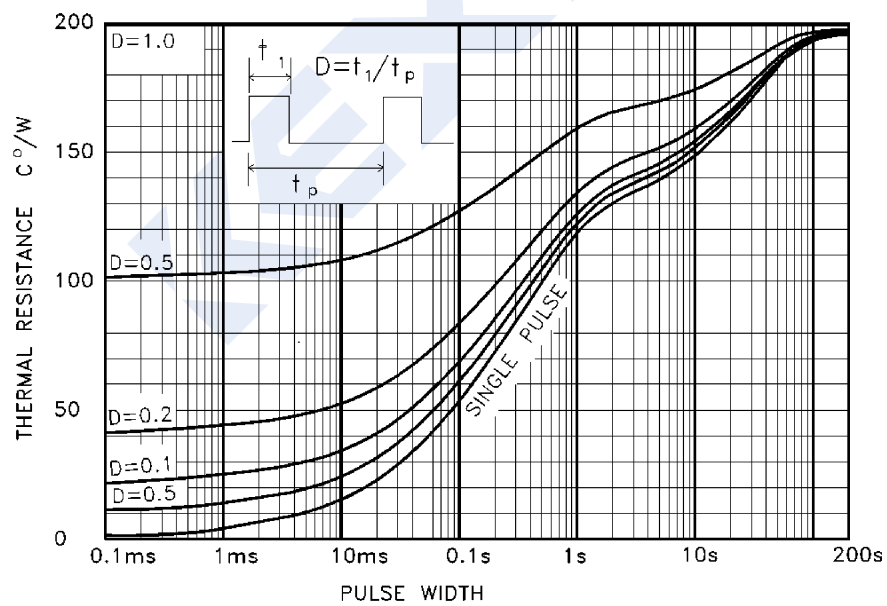
PNP Transistors

FMMT722 (KMMT722)

■ Typical Characteristics



DERATING CURVE



MAXIMUM TRANSIENT THERMAL RESISTANCE