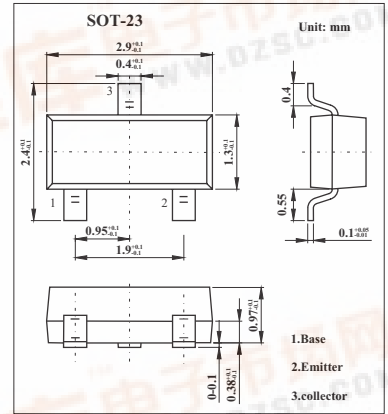


SMD Type Transistors

High Voltage Transistor
FMMT458

■ Features

- 400 Volt V_{CEO}



■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|---|-----------------------------------|-------------|------|
| Collector-base voltage | V _{CB0} | 400 | V |
| Collector-emitter voltage | V _{CE0} | 400 | V |
| Emitter-base voltage | V _{EB0} | 5 | V |
| Peak collector current | I _{CM} | 1 | A |
| Collector current | I _C | 225 | mA |
| Base current | I _B | 200 | mA |
| Power dissipation | P _{tot} | 500 | mW |
| Operating and storage temperature range | T _j , T _{stg} | -55 to +150 | °C |

FM458

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|---------------------------------------|---------------|---------------------------------|-----|------|-----|------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=100\mu A$ | 400 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=10mA$ | 400 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=100\mu A$ | 5 | | | V |
| Collector cutoff current | I_{CBO} | $V_{CB}=320V$ | | | 100 | nA |
| Collector Cut-Off Current | I_{CES} | $V_{CE}=320V$ | | | 100 | nA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=4V$ | | | 100 | nA |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=20mA, I_B=2mA$ | | | 0.2 | V |
| | | $I_C=50mA, I_B=6mA$ | | | 0.5 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C=50mA, I_B=5mA$ | | | 0.9 | V |
| Base-emitter turn on voltage | $V_{BE(on)}$ | $I_C=50mA, V_{CE}=10V$ | | | 0.9 | V |
| Static Forward Current Transfer Ratio | h_{FE} | $I_C=1mA, V_{CE}=10V$ | 100 | | | |
| | | $I_C=50mA, V_{CE}=10V^*$ | 100 | | 300 | |
| | | $I_C=100mA, V_{CE}=10V^*$ | 15 | | | |
| Transition frequency | f_T | $I_C=10mA, V_{CE}=20V, f=20MHz$ | 50 | | | MHz |
| Output capacitance | C_{obo} | $V_{CB}=20V, f=1MHz$ | | | 5 | pF |
| Switching times | t_{on} | $I_C=50mA, V_{CC}=100V$ | | 135 | | ns |
| | t_{off} | $I_{B1}=5mA, I_{B2}=-10mA$ | | 2260 | | ns |

■ Marking

| | |
|---------|-----|
| Marking | 458 |
|---------|-----|