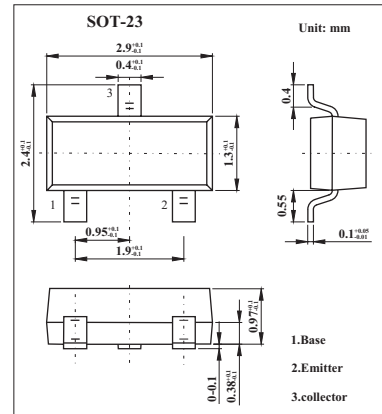


Avalanche Transistor

FMMT417



■ Features

- High speed pulse generators
- SOT23 NPN Silicon Planar

■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|---|-----------------------------------|-------------|------|
| Collector-base voltage | V _{CB0} | 320 | V |
| Collector-emitter voltage | V _{CEO} | 100 | V |
| Emitter-base voltage | V _{EB0} | 6 | V |
| Peak collector current | I _{CM} | 60 | A |
| Collector current | I _C | 500 | mA |
| Power dissipation | P _{tot} | 330 | mW |
| Operating and storage temperature range | T _j , T _{stg} | -55 to +150 | °C |

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|--|----------------------|---|-----|-----|-----|------|
| Collector-base breakdown voltage | V _{(BR)CBO} | I _C =1mA | 320 | | | V |
| Collector-emitter breakdown voltage * | V _{(BR)CEO} | I _C =100μA | 100 | | | V |
| Emitter-base breakdown voltage | V _{(BR)EBO} | I _E =10μA | 6 | | | V |
| Collector cutoff current | I _{CB0} | V _{CB} =80V | | | 0.1 | μA |
| | | V _{CB} =80V, T _{amb} =100°C | | | 10 | μA |
| Emitter cut-off current | I _{EBO} | V _{EB} =4V | | | 0.1 | μA |
| Collector-emitter saturation voltage * | V _{CE(sat)} | I _C =10mA, I _B =1mA | | | 0.5 | V |
| Base-emitter saturation voltage * | V _{BE(sat)} | I _C =10mA, I _B =1mA | | | 0.9 | V |
| Current in second breakdown | I _{SB} | V _C =200V, C _{CE} =620pF | 15 | | | A |
| | | V _C =250V, C _{CE} =620pF | 25 | | | A |
| Static Forward Current Transfer Ratio | h _{FE} | I _C =10mA, V _{CE} =10V * | 25 | | | |
| Transition frequency | f _T | I _C =10mA, V _{CE} =20V, f=20MHz | 40 | | | MHz |
| Collector-base capacitance | C _{cb} | V _{CB} =20V, I _E =0, f=1MHz | | | 8 | pF |

* Pulse test: t_p = 300 μs; d ≤ 0.02.

■ Marking

| | |
|---------|-----|
| Marking | 417 |
|---------|-----|