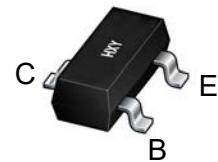


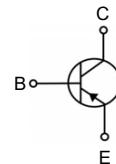


Features

Low equivalent on-resistance



SOT-23



Package Marking and Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|------------|--------|---------|----------|
| HFMMT718TC | SOT-23 | 718 | 3000 |

Maxmim Ratings (Ta=25 unless otherwise noted)

| Symbol | Parameter | Value | Unit |
|-----------------------------------|--|----------|------|
| V _{CBO} | Collector-Base Voltage | -20 | V |
| V _{CEO} | Collector-Emitter Voltage | -20 | V |
| V _{EBO} | Emitter-Base Voltage | -7 | V |
| I _C | Collector Current | -1.5 | A |
| I _B | Base Current | -0.5 | A |
| P _C | Collector Power Dissipation | 350 | mW |
| R _{θJA} | Thermal Resistance From Junction To Ambient | 500 | °C/W |
| T _J , T _{stg} | Operation Junction And Storage Temperature Range | -55~+150 | °C |

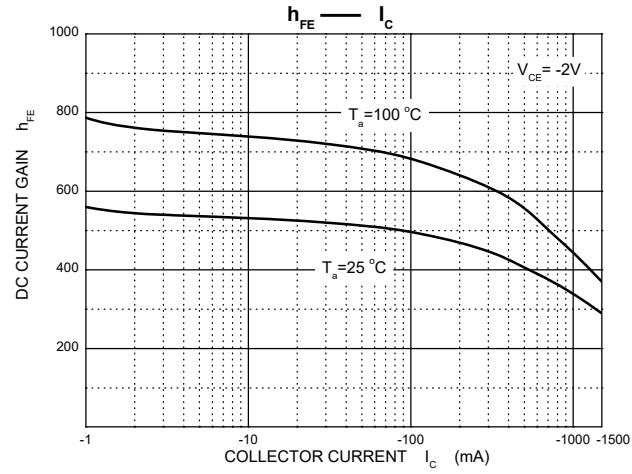
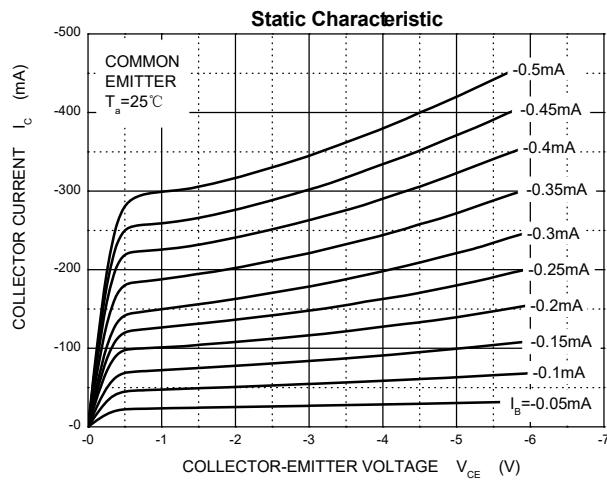


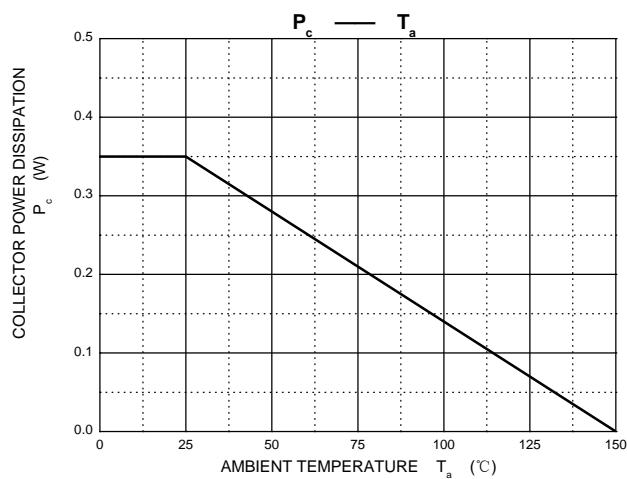
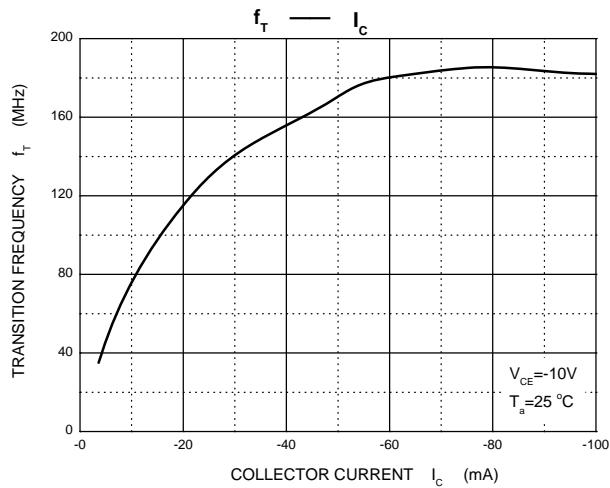
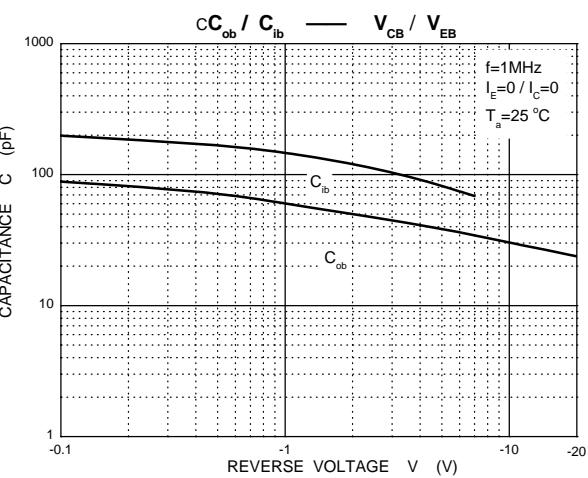
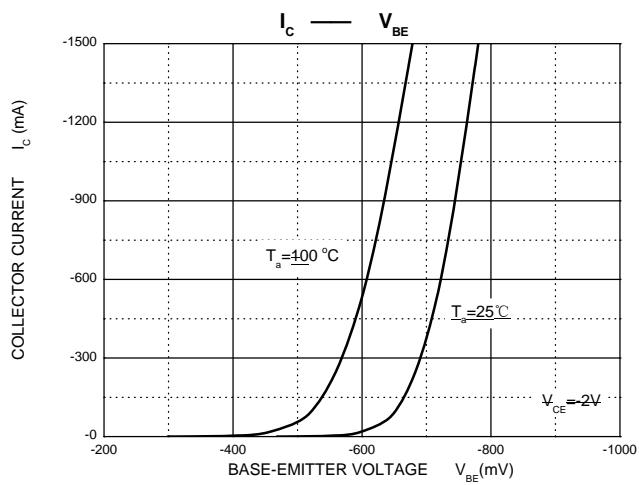
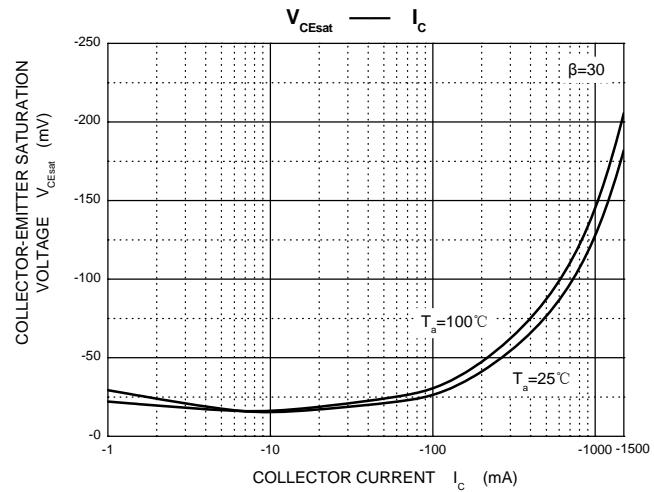
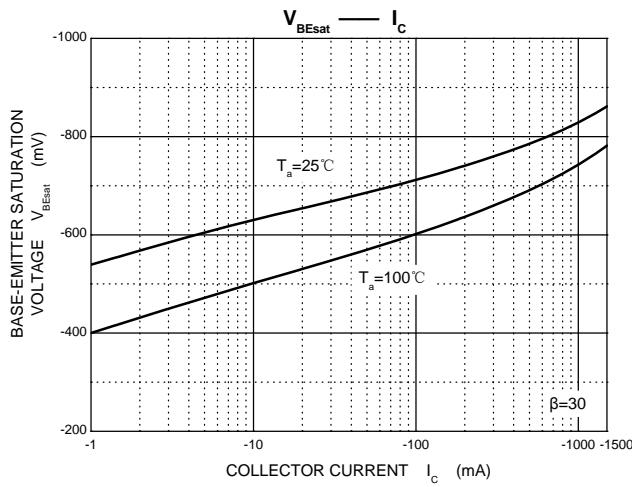
Electrical Characteristics (Ta=25 unless otherwise noted)

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------------------|--------------------|---|-----|-----|------|---------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=-100\mu A, I_E=0$ | -20 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C= -10mA, I_B=0$ | -20 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E= -100\mu A, I_C=0$ | -7 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=-15V, I_E=0$ | | | -0.1 | μA |
| Collector cut-off current | I_{CES} | $V_{CE}=-15V, V_{BE}=0$ | | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}= -4V, I_C=0$ | | | -0.1 | μA |
| DC current gain | $h_{FE(1)}^*$ | $V_{CE}=-2V, I_C=-10mA$ | 300 | | | |
| | $h_{FE(2)}^*$ | $V_{CE}=-2V, I_C=-100mA$ | 300 | 600 | | |
| | $h_{FE(3)}^*$ | $V_{CE}=-2V, I_C=-2A$ | 150 | | | |
| | $h_{FE(4)}^*$ | $V_{CE}=-2V, I_C=-4A$ | 35 | | | |
| Collector-emitter saturation voltage | $V_{CE(sat)(1)}^*$ | $I_C=-0.1A, I_B=-10mA$ | | | -40 | mV |
| | $V_{CE(sat)(2)}^*$ | $I_C=-1A, I_B=-20mA$ | | | -200 | mV |
| | $V_{CE(sat)(3)}^*$ | $I_C=-1.5A, I_B=-50mA$ | | | -220 | mV |
| Base-emitter saturation voltage | $V_{BE(sat)}^*$ | $I_C=-1.5A, I_B= -50mA$ | | | -1 | V |
| Base-emitter voltage | $V_{BE(on)}^*$ | $V_{CE}=-2V, I_C=-2A$ | | | -1 | V |
| Transition frequency | f_T | $V_{CE}=-10V, I_C=-50mA, f=100MHz$ | 150 | | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB}=-10V, f=1MHz$ | | | 30 | pF |
| Turn-on Time | $t_{(on)}$ | $V_{CC}=-10V, I_C=-1A, I_B1=I_B2=-20mA$ | | 40 | | ns |
| Turn-off Time | $t_{(off)}$ | | | 670 | | ns |

*Measured under pulse conditions . Pulse width =300 μs . Duty cycle $\leq 2\%$.

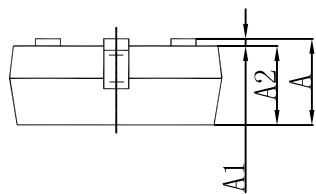
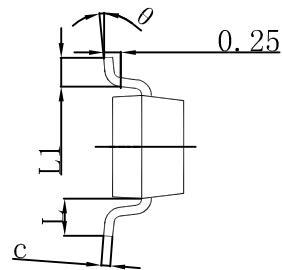
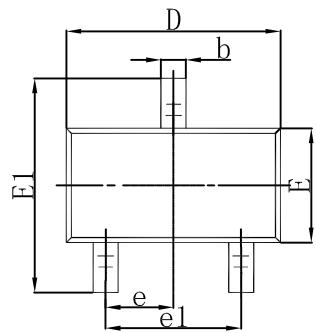
Typical Characteristics







SOT-23 Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 0.900 | 1.150 | 0.035 | 0.045 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.900 | 1.050 | 0.035 | 0.041 |
| b | 0.300 | 0.500 | 0.012 | 0.020 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 2.800 | 3.000 | 0.110 | 0.118 |
| E | 1.200 | 1.400 | 0.047 | 0.055 |
| E1 | 2.250 | 2.550 | 0.089 | 0.100 |
| e | 0.950 TYP | | 0.037 TYP | |
| e1 | 1.800 | 2.000 | 0.071 | 0.079 |
| L | 0.550 REF | | 0.022 REF | |
| L1 | 0.300 | 0.500 | 0.012 | 0.020 |
| θ | 0° | 8° | 0° | 8° |



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