

SOT223 PNP SILICON PLANAR DARLINGTON TRANSISTORS

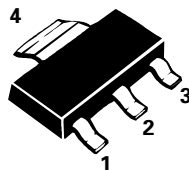
ISSUE 5- MARCH 2001



FZTA64

PARTMARKING DETAILS: FZTA64

COMPLIMENTARY TYPE: FZTA14



SOT223

ABSOLUTE MAXIMUM RATINGS.

| PARAMETER | SYMBOL | VALUE | UNIT |
|--|----------------|-------------|-------------|
| Collector-Base Voltage | V_{CBO} | -30 | V |
| Collector-Emitter Voltage | V_{CEO} | -30 | V |
| Emitter-Base Voltage | V_{EBO} | -10 | V |
| Peak Pulse Current | I_{CM} | -800 | mA |
| Continuous Collector Current | I_C | -500 | mA |
| Peak Base Current | I_{BM} | -200 | mA |
| Power Dissipation at $T_{amb}=25^{\circ}C$ | P_{tot} | 2 | W |
| Operating and Storage Temperature Range | $T_j; T_{stg}$ | -55 to +150 | $^{\circ}C$ |

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$ unless otherwise stated).

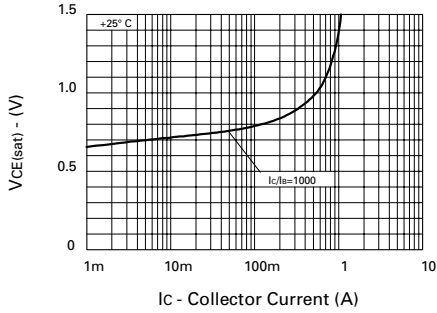
| PARAMETER | SYMBOL | MIN. | MAX. | UNIT | CONDITIONS. |
|---------------------------------------|---------------|------------|------|------|---|
| Collector-Base Breakdown Voltage | $V_{(BR)CBO}$ | -30 | | V | $I_C = -10\mu A, I_E = 0$ |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | -30 | | V | $I_C = -10mA, I_B = 0^*$ |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | -10 | | V | $I_E = -10\mu A, I_C = 0$ |
| Collector Cut-Off Current | I_{CBO} | | -100 | nA | $V_{CB} = -30V, I_E = 0$ |
| Emitter Cut-Off Current | I_{EBO} | | -100 | nA | $V_{EB} = -10V, I_C = 0$ |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | | -1.5 | V | $I_C = -100mA, I_B = -0.1mA^*$ |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | | -2.0 | V | $I_C = -100mA, I_B = -0.1mA^*$ |
| Static Forward Current Transfer Ratio | h_{FE} | 10K 20K | | | $I_C = -10mA, V_{CE} = -5V$ $I_C = -100mA, V_{CE} = -5V^*$ |
| Transition Frequency | f_T | 125 | | MHz | $I_C = -50mA, V_{CE} = -5V$ $f = 20MHz$ |

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

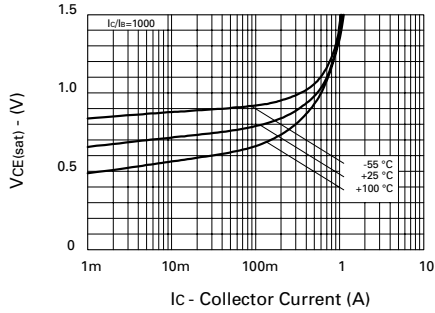


FZTA64

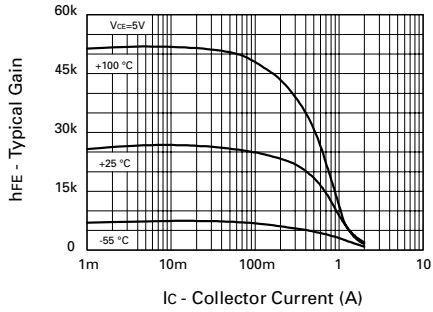
TYPICAL CHARACTERISTICS



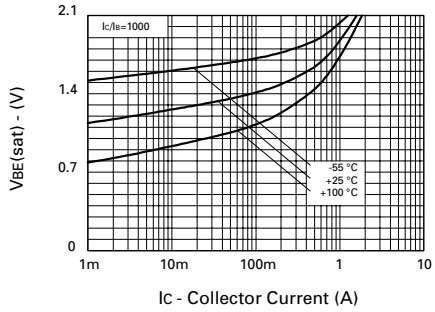
$V_{CE(sat)}$ v I_C



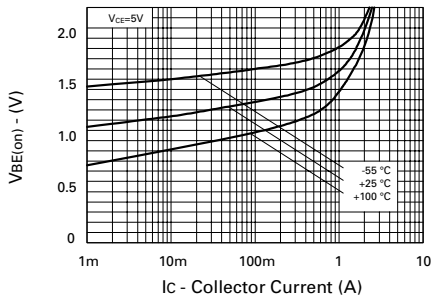
$V_{CE(sat)}$ v I_C



h_{FE} v I_C



$V_{BE(sat)}$ v I_C



$V_{BE(on)}$ v I_C