

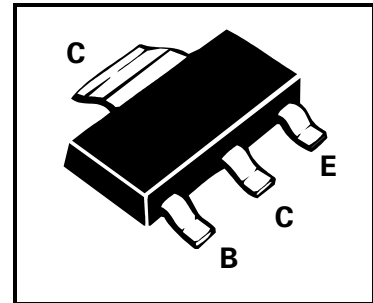
SOT223 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

FZT560

ISSUE 1- NOVEMBER 1998

FEATURES

- * 500 Volt V_{CEO}
- * 150mA continuous current
- * $P_{tot} = 2$ Watt



PARTMARKING DETAIL – FZT560

ABSOLUTE MAXIMUM RATINGS.

| PARAMETER | SYMBOL | VALUE | UNIT |
|--|---------------|-------------|-------------|
| Collector-Base Voltage | V_{CBO} | -500 | V |
| Collector-Emitter Voltage | V_{CEO} | -500 | V |
| Emitter-Base Voltage | V_{EBO} | -5 | V |
| Peak Pulse Current | I_{CM} | -500 | mA |
| Continuous Collector Current | I_C | -150 | 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 | $V_{(BR)CBO}$ | -500 | | V | $I_C = -100\mu A$ |
| Collector-Emitter Breakdown Voltage | $V_{CEO(SUS)}$ | -500 | | V | $I_C = -10mA^*$ |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | -5 | | V | $I_E = -100\mu A$ |
| Collector Cut-Off Current | I_{CBO} | | -100 | nA | $V_{CB} = -500V$ |
| Collector Cut-Off Current | I_{CES} | | -100 | nA | $V_{CE} = -500V$ |
| Emitter Cut-Off Current | I_{EBO} | | -100 | nA | $V_{EB} = -5V$ |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | | -0.20 -0.5 | V V | $I_C = -20mA, I_B = -2mA$ $I_C = -50mA, I_B = -10mA^*$ |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | | -0.9 | V | $I_C = -50mA, I_B = -10mA^*$ |
| Base-Emitter Turn On Voltage | $V_{BE(on)}$ | | -0.9 | V | $I_C = -50mA, V_{CE} = -10V^*$ |
| Static Forward Current Transfer Ratio | h_{FE} | 100 80 15 typ | 300 300 | | $I_C = -1mA, V_{CE} = -10V$ $I_C = -50mA, V_{CE} = -10V^*$ $I_C = -100mA, V_{CE} = -10V^*$ |
| Transition Frequency | f_T | 60 | | MHz | $I_C = -10mA, V_{CE} = -20V$ $f = 50MHz$ |
| Output Capacitance | C_{obo} | | 8 | pF | $V_{CB} = -20, f = 1MHz$ |
| Switching times | t_{on} t_{off} | 110 typ. 1.5 typ | | ns μs | $V_{CE} = -100, I_C = -50mA,$ $I_{B1} = -5mA, I_{B2} = 10mA,$ |

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

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TYPICAL CHARACTERISTICS

