

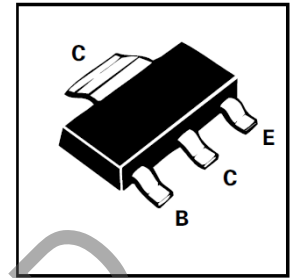
FEATURES

- * High breakdown voltage

APPLICATIONS

- * Suitable for video output stages in TV sets and switch mode power supplies

COMPLIMENTARY TYPE – FZTA42
PARTMARKING DETAIL – DEVICE TYPE IN FULL



ABSOLUTE MAXIMUM RATINGS.

| PARAMETER | SYMBOL | VALUE | UNIT |
|--|----------------|-------------|-------------|
| Collector-Base Voltage | V_{CBO} | -300 | V |
| Collector-Emitter Voltage | V_{CEO} | -300 | V |
| Emitter-Base Voltage | V_{EBO} | -5 | V |
| Base Current | I_B | -100 | mA |
| Continuous Collector Current | I_C | -500 | 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 $T_{amb} = 25^{\circ}C$).

| PARAMETER | SYMBOL | MIN. | TYP. | MAX. | UNIT | CONDITIONS. |
|---------------------------------------|---------------|----------------|------|-------|---------|---|
| Collector-Base Breakdown Voltage | $V_{(BR)CBO}$ | -300 | | | V | $I_C = -100\mu A, I_E = 0$ |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | -300 | | | V | $I_C = -1mA, I_B = 0^*$ |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | -5 | | | V | $I_E = -100\mu A, I_C = 0$ |
| Collector Cut-Off Current | I_{CBO} | | | -0.25 | μA | $V_{CB} = -200V, I_E = 0$ |
| Emitter Cut-Off Current | I_{EBO} | | | -0.1 | μA | $V_{EB} = -3V, I_C = 0$ |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | | | -0.5 | V | $I_C = -20mA, I_B = -2mA$ |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | | | -0.9 | V | $I_C = -20mA, I_B = -2mA$ |
| Static Forward Current Transfer Ratio | h_{FE} | 25 40 25 | | | | $I_C = -1mA, V_{CE} = -10V^*$ $I_C = -10mA, V_{CE} = -10V^*$ $I_C = -30mA, V_{CE} = -10V^*$ |
| Transition Frequency | f_T | 50 | | | MHz | $I_C = -10mA, V_{CE} = -20V$ $f = 20MHz$ |
| Output Capacitance | C_{obo} | | | 6 | pF | $V_{CB} = -20V, f = 1MHz$ |

* Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$
For typical characteristics graphs see FMMTA92 datasheet.

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