

NOT RECOMMENDED FOR NEW DESIGN USE DZTA92

FZTA92

### SOT223 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

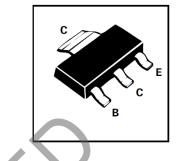
**FEATURES** 

- 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 <sub>CBO</sub>                 | -300        | V    |
| Collector-Emitter Voltage                   | V <sub>CEO</sub>                 | -300        | V    |
| Emitter-Base Voltage                        | V <sub>EBO</sub>                 | -5          | V    |
| Base Current                                | I <sub>B</sub>                   | -100        | mA   |
| Continuous Collector Current                | Ι <sub>C</sub>                   | -500        | mA   |
| Power Dissipation at T <sub>amb</sub> =25°C | P <sub>tot</sub>                 | 2           | W    |
| Operating and Storage Temperature Range     | T <sub>j</sub> :T <sub>stg</sub> | -55 to +150 | °C   |
| ELECTRICAL CHARACTERISTICS (at Tamp = 25°C  |                                  |             |      |

# ELECTRICAL CHARACTERISTICS (at Tamh = 25°C).

|  |                      |                | -1-  |       |      |  |
|--|----------------------|----------------|------|-------|------|--|
| PARAMETER                                | SYMBOL               | MIN.           | TYP. | MAX.  | UNIT | CONDITIONS.  |
| Collector-Base<br>Breakdown Voltage      | V <sub>(BR)CBO</sub> | -300           |      |       | V    | I <sub>C</sub> =-100μA, I <sub>E</sub> =0  |
| Collector-Emitter<br>Breakdown Voltage   | V <sub>(BR)CEO</sub> | -300           |      |       | V    | I <sub>C</sub> =-1mA, I <sub>B</sub> =0*   |
| Emitter-Base<br>Breakdown Voltage        | V <sub>(BR)EBO</sub> | -5             |      |       | V    | I <sub>E</sub> =-100μA, I <sub>C</sub> =0  |
| Collector Cut-Off<br>Current             | I <sub>CBO</sub>     |                |      | -0.25 | μA   | V <sub>CB</sub> =-200V, I <sub>E</sub> =0  |
| Emitter Cut-Off Current                  | I <sub>EBO</sub>     |                |      | -0.1  | μA   | V <sub>EB</sub> =-3V, I <sub>C</sub> =0  |
| Collector-Emitter<br>Saturation Voltage  | V <sub>CE(sat)</sub> |                |      | -0.5  | V    | I <sub>C</sub> =-20mA, I <sub>B</sub> =-2mA  |
| Base-Emitter<br>Saturation Voltage       | V <sub>BE(sat)</sub> |                |      | -0.9  | V    | I <sub>C</sub> =-20mA, I <sub>B</sub> =-2mA  |
| Static Forward Current<br>Transfer Ratio | h <sub>FE</sub>      | 25<br>40<br>25 |      |       |      | I <sub>C</sub> =-1mA, V <sub>CE</sub> =-10V*<br>I <sub>C</sub> =-10mA, V <sub>CE</sub> =-10V*<br>I <sub>C</sub> =-30mA, V <sub>CE</sub> =-10V* |
| Transition<br>Frequency                  | f <sub>T</sub>       | 50             |      |       | MHz  | I <sub>C</sub> =-10mA, V <sub>CE</sub> =-20V<br>f=20MHz  |
| Output Capacitance                       | C <sub>obo</sub>     |                |      | 6     | pF   | V <sub>CB</sub> =-20V, f=1MHz  |

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



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