

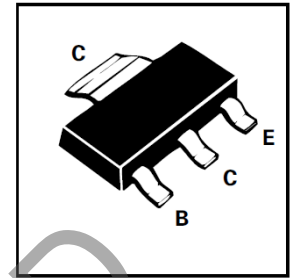
**FEATURES**

- \* 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	$V_{CB0}$	-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	$V_{(BR)CB0}$	-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	$\mu A$	$V_{CB} = -200V, I_E = 0$
Emitter Cut-Off Current	$I_{EBO}$			-0.1	$\mu A$	$V_{EB} = -3V, I_C = 0$
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 $\mu s$ . Duty cycle  $\leq 2\%$   
For typical characteristics graphs see FMMTA92 datasheet.

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