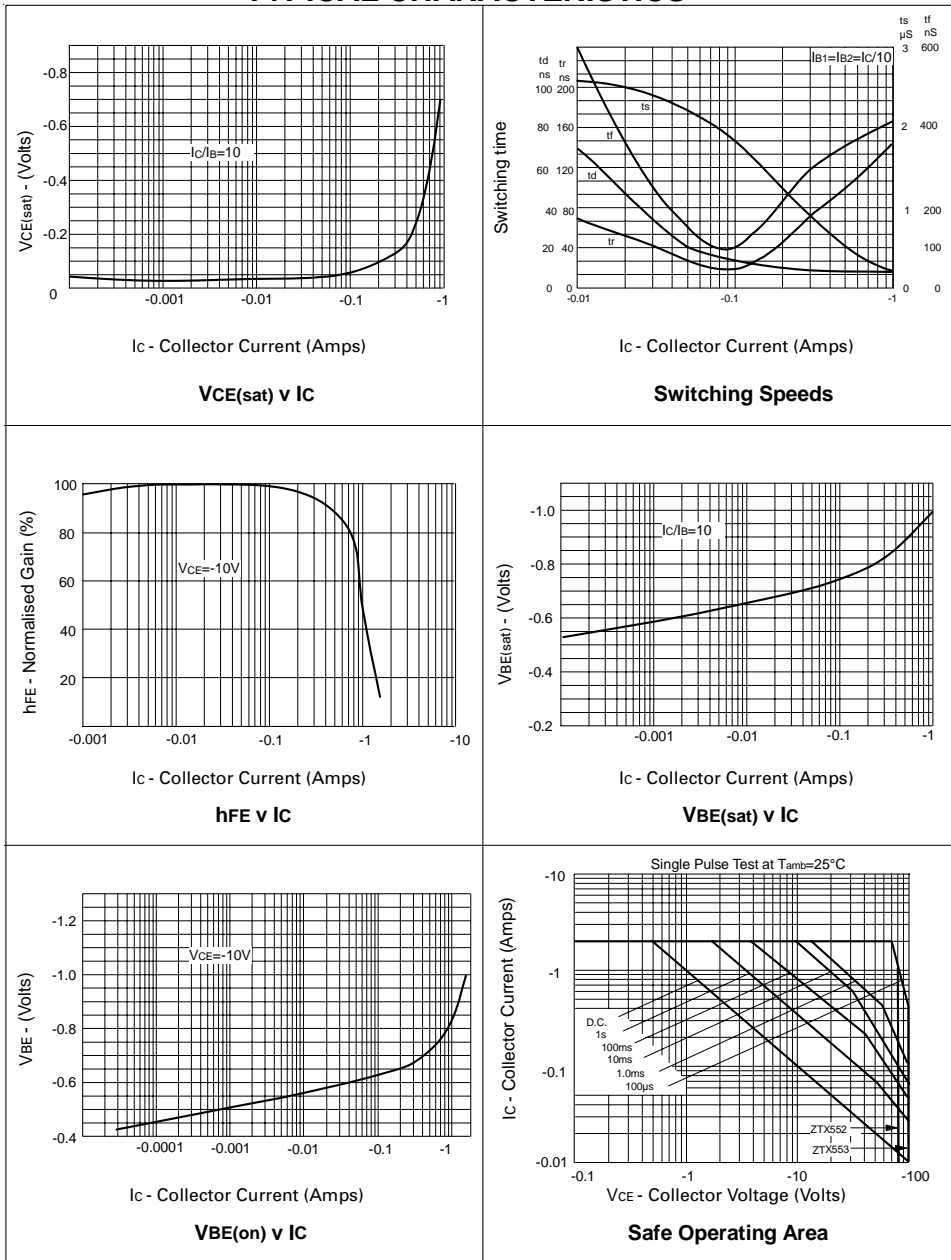


# ZTX552 ZTX553

# PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

# ZTX552 ZTX553

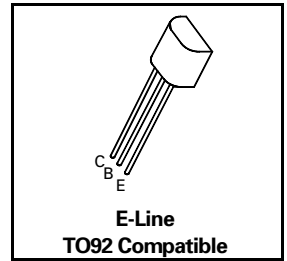
## TYPICAL CHARACTERISTICS



ISSUE 1 – MARCH 94

### FEATURES

- \* 100 Volt  $V_{CE0}$
- \* 1 Amp continuous current
- \*  $P_{tot}=1$  Watt



### ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	ZTX552	ZTX553	UNIT
Collector-Base Voltage	$V_{CBO}$	-100	-120	V
Collector-Emitter Voltage	$V_{CEO}$	-80	-100	V
Emitter-Base Voltage	$V_{EBO}$	-5		V
Peak Pulse Current	$I_{CM}$	-2		A
Continuous Collector Current	$I_C$	-1		A
Power Dissipation: at $T_{amb}=25^\circ\text{C}$ derate above $25^\circ\text{C}$	$P_{tot}$	1 5.7		W mW/ $^\circ\text{C}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 to +200		$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$ ).

PARAMETER	SYMBOL	ZTX552		ZTX553		UNIT	CONDITIONS.
		MIN.	MAX.	MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-100		-120		V	$I_C=-100\mu\text{A}$
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	-80		-100		V	$I_C=-10\text{mA}$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		-5		V	$I_E=-100\mu\text{A}$
Collector Cut-Off Current	$I_{CBO}$		-0.1		-0.1	$\mu\text{A}$	$V_{CB}=-80\text{V}$ $V_{CE}=-100\text{V}$
Emitter Cut-Off Current	$I_{EBO}$		-0.1		-0.1	$\mu\text{A}$	$V_{EB}=-4\text{V}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.25		-0.25	V	$I_C=-150\text{mA}, I_B=-15\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.1		-1.1	V	$I_C=-150\text{mA}, I_B=-15\text{mA}^*$
Base-Emitter Turn-on Voltage	$V_{BE(on)}$		-1.0		-1.0	V	$I_C=-150\text{mA}, V_{CE}=-10\text{V}^*$
Static Forward Current Transfer Ratio	$h_{FE}$	40 10	150	40 10	200		$I_C=-150\text{mA}, V_{CE}=-10\text{V}^*$ $I_C=-1\text{A}, V_{CE}=-10\text{V}^*$
Transition Frequency	$f_T$	150		150		MHz	$I_C=-50\text{mA}, V_{CE}=-10\text{V}$ $f=100\text{MHz}$
Output Capacitance	$C_{obo}$		12		12	MHz	$V_{CB}=-10\text{V}, f=1\text{MHz}$

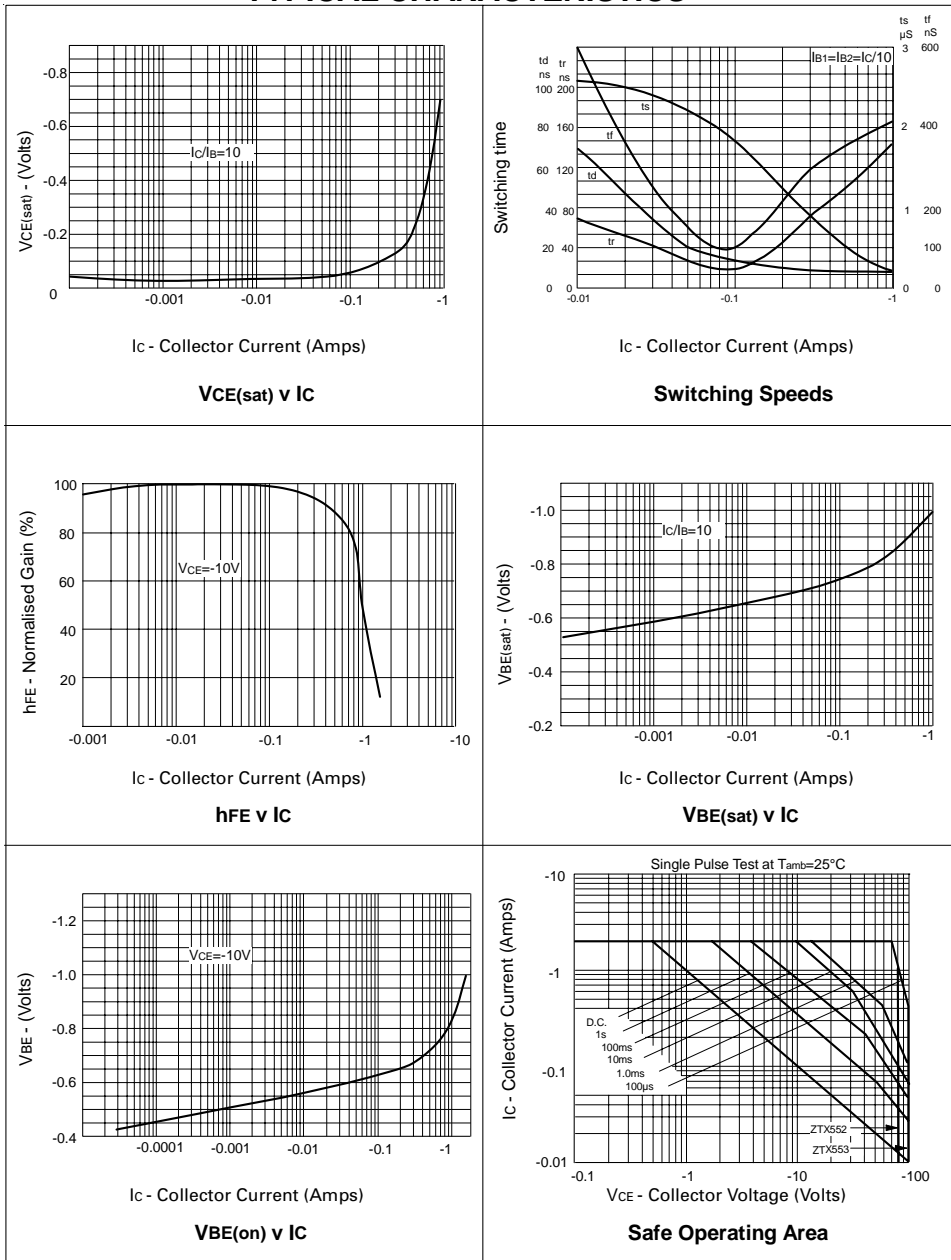
\*Measured under pulsed conditions. Pulse width=300 $\mu\text{s}$ . Duty cycle  $\leq 2\%$

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# PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

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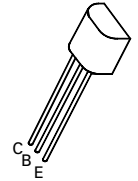
## TYPICAL CHARACTERISTICS



## ISSUE 1 – MARCH 94

### FEATURES

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