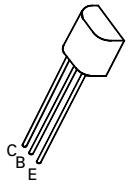
PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

ZTX552 ZTX553

ISSUE 1 – MARCH 94

FEATURES

* 100 Volt V_{CEO}
* 1 Amp continuous current
* P_{tot}=1 Watt



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

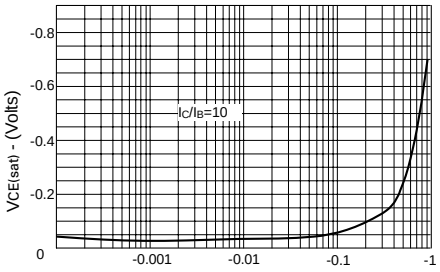
PARAMETER	SYMBOL	ZTX552	ZTX553	UNIT
Collector-Base Voltage	V_{CBO}	-100	-120	V
Collector-Emitter Voltage	V_{CEO}	-80	-100	V
Emitter-Base Voltage	V_{EBO}	-5		V
Peak Pulse Current	I_{CM}	-2		A
Continuous Collector Current	I_C	-1		A
Power Dissipation: at T_{amb}=25°C derate above 25°C	P_{tot}	1 5.7		W mW/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

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C).

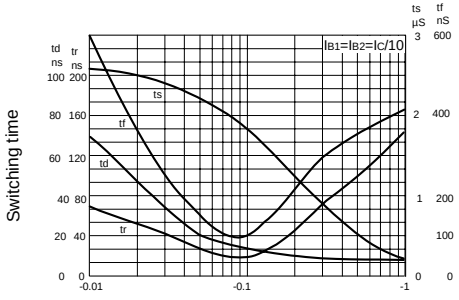
PARAMETER	SYMBOL	ZTX552		ZTX553		UNIT	CONDITIONS.
		MIN.	MAX.	MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-100		-120		V	I_C=-100μA
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	-80		-100		V	I_C=-10mA
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		-5		V	I_E=-100μA
Collector Cut-Off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

*Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤2%

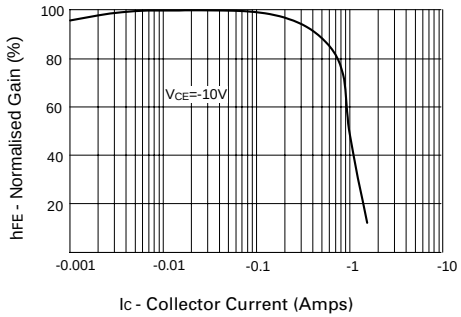
TYPICAL CHARACTERISTICS



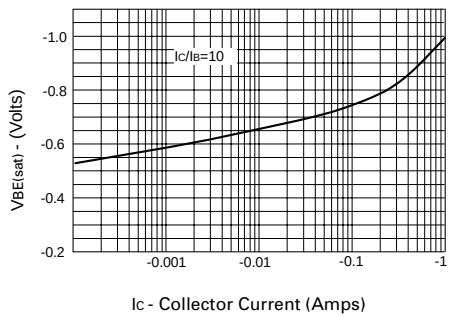
VCE(sat) v IC



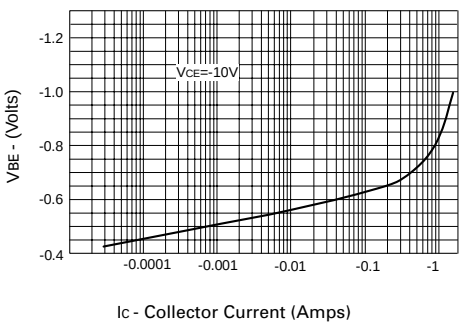
Switching Speeds



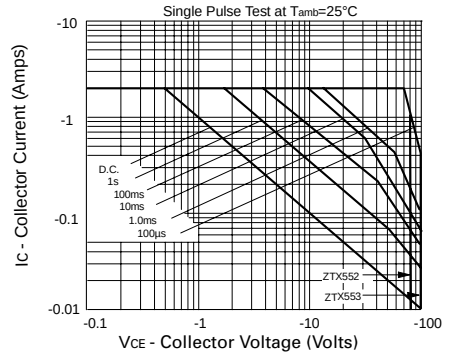
hFE v IC



VBE(sat) v IC



VBE(on) v IC



Safe Operating Area