

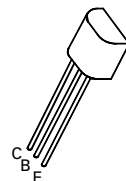
PNP SILICON PLANAR MEDIUM POWER HIGH VOLTAGE TRANSISTORS

ZTX556 ZTX557

ISSUE 1 – JULY 94

FEATURES

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



**E-Line
TO92 Compatible**

ABSOLUTE MAXIMUM RATINGS.

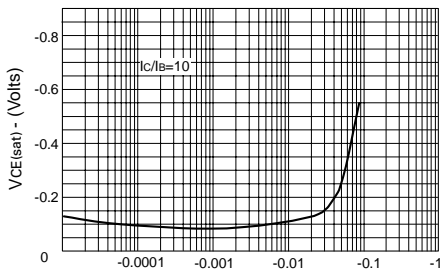
PARAMETER	SYMBOL	ZTX556	ZTX557	UNIT
Collector-Base Voltage	V_{CBO}	-200	-300	V
Collector-Emitter Voltage	V_{CEO}	-200	-300	V
Emitter-Base Voltage	V_{EBO}		-5	V
Peak Pulse Current	I_{CM}		-1	A
Continuous Collector Current	I_C		-0.5	A
Power Dissipation	P_{tot}		1.0	W
Operating and Storage Temperature Range	$T_j:T_{stg}$		-55 to +200	°C

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

PARAMETER	SYMBOL	ZTX556		ZTX557		UNIT	CONDITIONS.
		MIN.	MAX.	MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-200		-300		V	$I_C = -100\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-200		-300		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	μA	$V_{CB} = -160\text{V}$ $V_{CE} = -200\text{V}$
Emitter Cut-Off Current	I_{EBO}		-0.1		-0.1	μA	$V_{EB} = -4\text{V}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.3		-0.3	V	$I_C = -50\text{mA}$, $I_B = -5\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1		-1	V	$I_C = -50\text{mA}$, $I_B = -5\text{mA}^*$
Base-Emitter Turn-on Voltage	$V_{BE(on)}$		-1		-1	V	$I_C = -50\text{mA}$, $V_{CE} = -10\text{V}^*$
Static Forward Current Transfer Ratio	h_{FE}	50 50	300	50 50	300		$I_C = -10\text{mA}$, $V_{CE} = -10\text{V}^*$ $I_C = -50\text{mA}$, $V_{CE} = -10\text{V}^*$
Transition Frequency	f_T	75		75		MHz	$I_C = -50\text{mA}$, $V_{CE} = -10\text{V}$ $f = 100\text{MHz}$

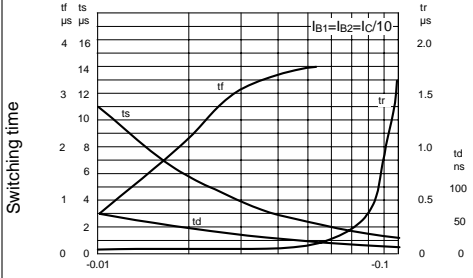
ZTX556 ZTX557

TYPICAL CHARACTERISTICS



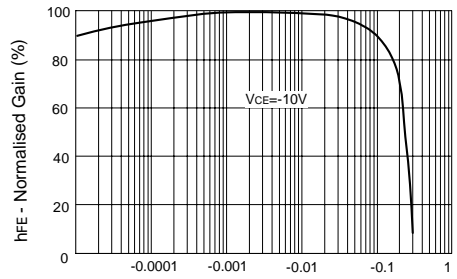
IC - Collector Current (Amps)

VCE(sat) v IC



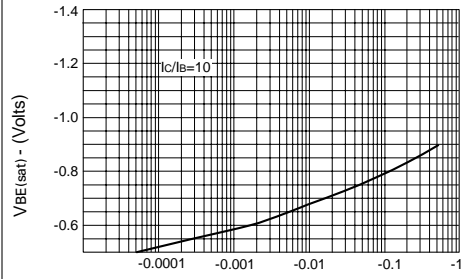
IC - Collector Current (Amps)

Switching Speeds



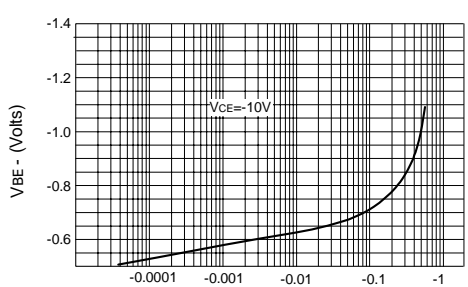
IC - Collector Current (Amps)

hFE v IC



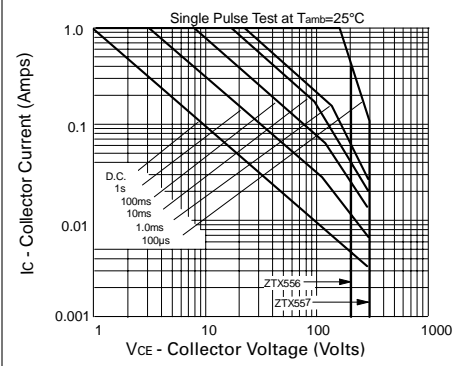
IC - Collector Current (Amps)

VBE(sat) v IC



IC - Collector Current (Amps)

VBE(on) v IC



Safe Operating Area