

PNP SILICON PLANAR MEDIUM POWER HIGH VOLTAGE TRANSISTORS

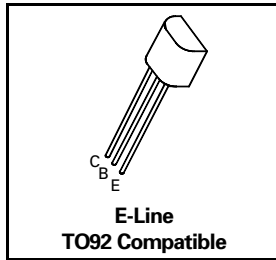
ZTX756

ZTX757

ISSUE 2 – JULY 94

FEATURES

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



ABSOLUTE MAXIMUM RATINGS.

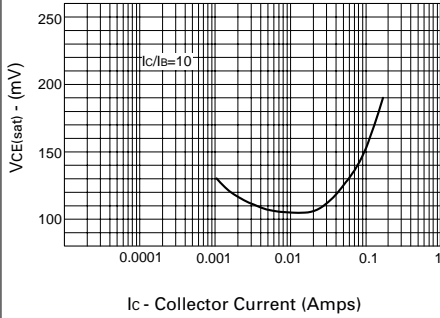
PARAMETER	SYMBOL	ZTX756	ZTX757	UNIT
Collector-Base Voltage	V_{CBO}	-200	-300	V
Collector-Emitter Voltage	V_{CEO}	-200	-300	V
Emitter-Base Voltage	V_{EBO}		-5	V
Peak Pulse Current	I_{CM}		-1	A
Continuous Collector Current	I_C		-0.5	A
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}		1	W
Operating and Storage Temperature Range	$T_j; T_{stg}$		-55 to +200	$^{\circ}C$

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

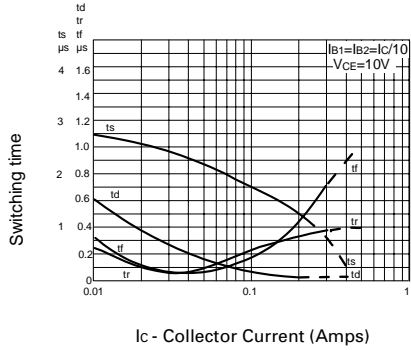
PARAMETER	SYMBOL	ZTX756		ZTX757		UNIT	CONDITIONS.
		MIN.	MAX.	MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-200		-300		V	$I_C = -100\mu A, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-200		-300		V	$I_C = -10mA, I_B = 0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		-5		V	$I_E = -100\mu A, I_C = 0$
Collector Cut-Off Current	I_{CBO}		-100		-100	nA	$V_{CB} = -160V, I_E = 0$ $V_{CB} = -200V, I_E = 0$
Emitter Cut-Off Current	I_{EBO}		-100		-100	nA	$V_{EB} = -3V, I_C = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.5		-0.5	V	$I_C = -100mA, I_B = -10mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.0		-1.0	V	$I_C = -100mA, I_B = -10mA^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		-1.0		-1.0	V	$I_C = -100mA, V_{CE} = -5V^*$
Static Forward Current Transfer Ratio	h_{FE}	50 40		50 40			$I_C = -100mA, V_{CE} = -5V^*$ $I_C = -10mA, V_{CE} = -5V^*$
Transition Frequency	f_T	30		30		MHz	$I_C = -10mA, V_{CE} = -20V$ $f = 20MHz$
Output Capacitance	C_{obo}		20		20	pF	$V_{CB} = -20V, f = 1MHz$

ZTX756 ZTX757

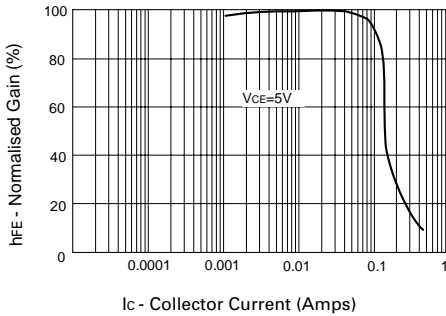
TYPICAL CHARACTERISTICS



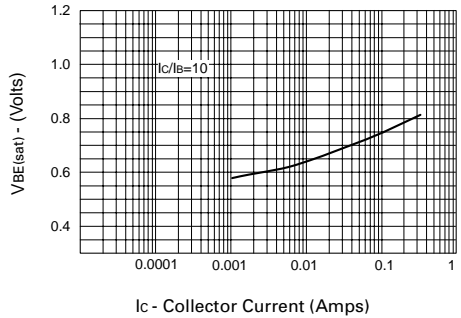
$V_{CE(sat)}$ v I_c



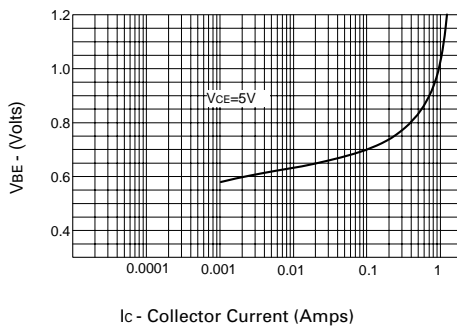
Switching Speeds



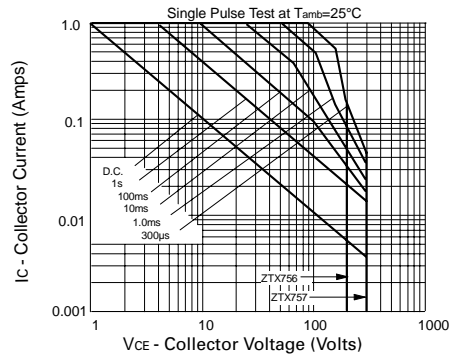
h_{FE} v I_c



$V_{BE(sat)}$ v I_c



$V_{BE(on)}$ v I_c



Safe Operating Area