

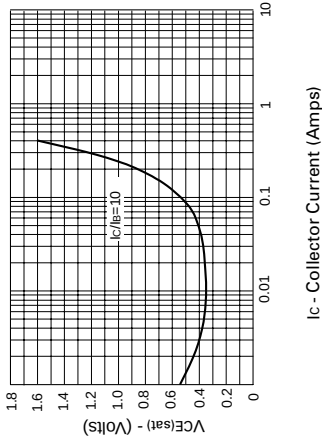
ZTX656
ZTX657

NPN SILICON PLANAR MEDIUM POWER
HIGH VOLTAGE TRANSISTORS

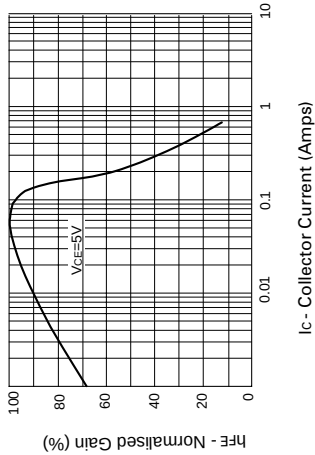
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ZTX656
ZTX657

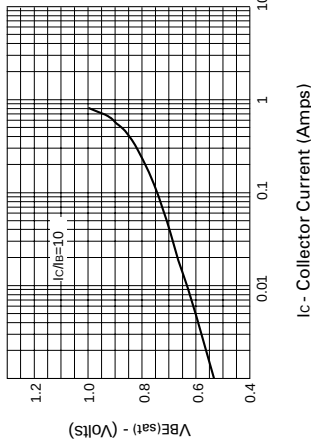
TYPICAL CHARACTERISTICS



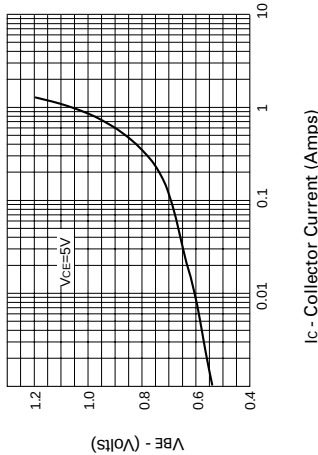
VCE(sat) v IC



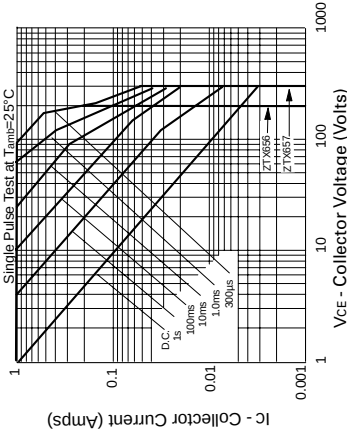
hFE v IC



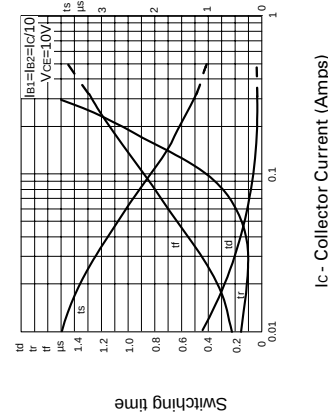
VBE(sat) v IC



VBE(on) v IC



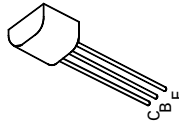
Safe Operating Area



Switching Speeds

FEATURES

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



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	ZTX656	ZTX657	UNIT
Collector-Base Voltage	V_{CBO}	200	300	V
Collector-Emitter Voltage	V_{CEO}	200	300	V
Emitter-Base Voltage	V_{EBO}	5	5	V
Peak Pulse Current	I_{CM}	1	1	A
Continuous Collector Current	I_C	0.5	0.5	A
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	1	1	W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +200	-55 to +200	$^{\circ}C$

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

PARAMETER	SYMBOL	ZTX656		ZTX657		CONDITIONS.
		MIN.	MAX.	MIN.	MAX.	
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	200	300			$I_C=100\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	200	300			$I_C=10mA, I_B=0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5	5			$I_E=100\mu A, I_C=0$
Collector Cut-Off Current	I_{CBO}		100			$V_{CB}=160V, I_E=0$ $V_{CB}=200V, I_E=0$
Emitter Cut-Off Current	I_{EBO}		100		100	$V_{EB}=3V, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.5		0.5	$I_C=100mA, I_B=10mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		1		1	$I_C=100mA, I_B=10mA^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		1		1	$I_C=100mA, V_{CE}=5V^*$
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			$I_C=10mA, V_{CE}=20V$ $f=20MHz$