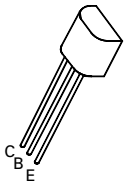
PNP SILICON PLANAR MEDIUM POWER HIGH VOLTAGE TRANSISTOR

ZTX558

ISSUE 1 – APRIL 94

FEATURES

* 400 Volt V_{CEO}
* 200mA continuous current
* P_{tot}= 1 Watt



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

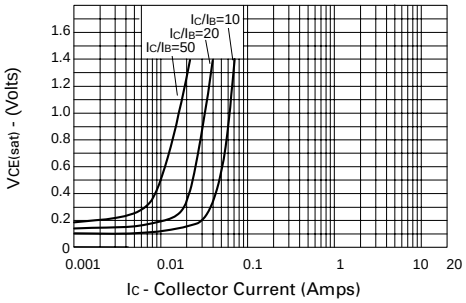
PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-400	V
Collector-Emitter Voltage	V_{CEO}	-400	V
Emitter-Base Voltage	V_{EBO}	-5	V
Continuous Collector Current	I_C	-200	mA
Power Dissipation	P_{tot}	1	W
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +200	°C

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

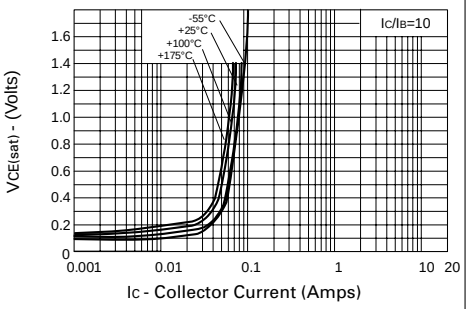
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-400			V	I_C=-100μA
Collector-Emitter Breakdown Voltage	$V_{BR(CEO)}$	-400			V	I_C=-10mA*
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	I_E=-100μA
Collector Cut-Off Current	I_{CBO}			-100	nA	V_{CB}=-320V
Collector Cut-Off Current	I_{CES}			-100	nA	V_{CE}=-320V
Emitter Cut-Off Current	I_{EBO}			-100	nA	V_{EB}=-4V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.2 -0.5	V V	I_C=-20mA, I_B=-2mA I_C=-50mA, I_B=-6mA
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-0.9	V	I_C=-50mA, I_B=-5mA
Base-Emitter Turn On Voltage	$V_{BE(on)}$			-0.9	V	IC=-50mA, V_{CE}=-10V
Static Forward Current Transfer Ratio	h_{FE}	100 100 15		300		I_C=-1mA, V_{CE}=-10V I_C=-50mA, V_{CE}=-10V I_C=-100mA, V_{CE}=-10V*
Transition Frequency	f_T	50			MHz	I_C=-10mA, V_{CE}=-20V f=20MHz
Collector-Base Breakdown Voltage	C_{obo}			5	pF	V_{CB}=-20V, f=1MHz
Switching times	t_{on} t_{off}		95 1600		ns ns	I_C=-50mA, V_C=-100V I_{B1}=5mA, I_{B2}=-10mA

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

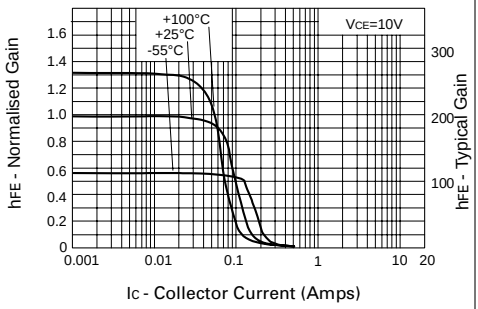
TYPICAL CHARACTERISTICS



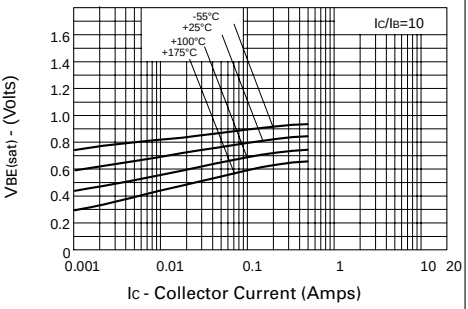
VCE(sat) v IC



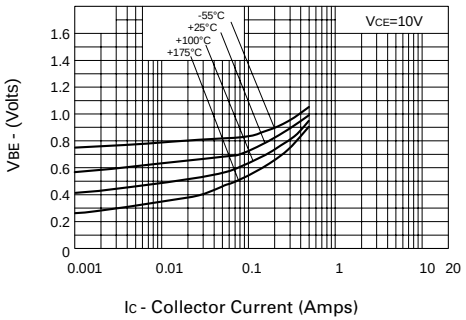
VCE(sat) v IC



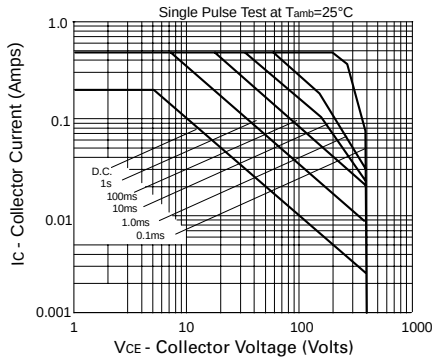
hFE v IC



VBE(sat) v IC



VBE(on) v IC



Safe Operating Area