

PNP SILICON PLANAR MEDIUM POWER HIGH VOLTAGE TRANSISTOR

ZTX576

ISSUE 1 – APRIL 94

FEATURES

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



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-200	V
Collector-Emitter Voltage	V_{CEO}	-200	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 $T_{amb}=25^{\circ}C$	P_{tot}	1	W
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +200	$^{\circ}C$

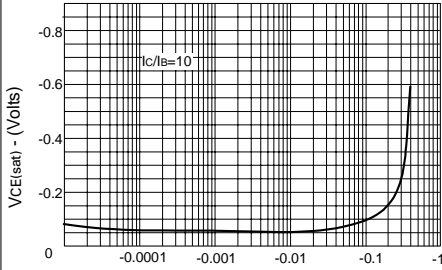
ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$).

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

*Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$

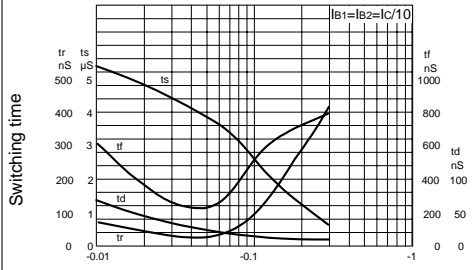
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TYPICAL CHARACTERISTICS



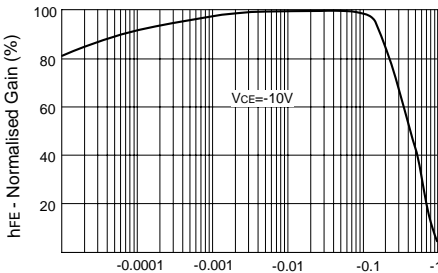
I_C - Collector Current (Amps)

$V_{CE(sat)}$ v I_C



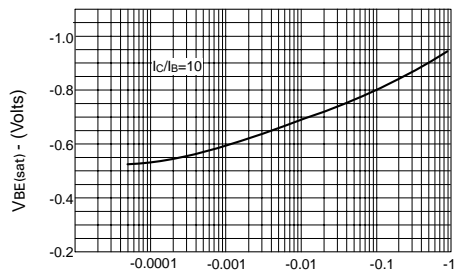
I_C - Collector Current (Amps)

Typical Switching Speeds



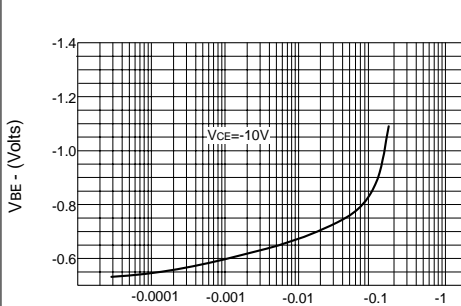
I_C - Collector Current (Amps)

h_{FE} v I_C



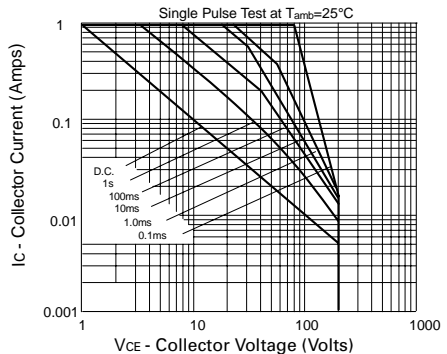
I_C - Collector Current (Amps)

$V_{BE(sat)}$ v I_C



I_C - Collector Current (Amps)

$V_{BE(on)}$ v I_C



Safe Operating Area