

PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

ZTX550 ZTX551

ISSUE 1 – MARCH 94

FEATURES

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



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

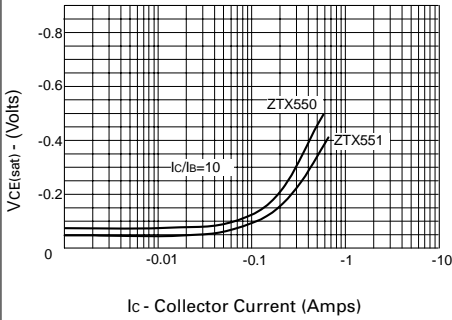
PARAMETER	SYMBOL	ZTX550	ZTX551	UNIT
Collector-Base Voltage	V_{CBO}	-60	-80	V
Collector-Emitter Voltage	V_{CEO}	-45	-60	V
Emitter-Base Voltage	V_{EBO}		-5	V
Peak Pulse Current	I_{CM}		-2	A
Continuous Collector Current	I_C		-1	A
Power Dissipation: at $T_{amb}=25^{\circ}C$ derate above $25^{\circ}C$	P_{tot}		1 5.7	W mW/ $^{\circ}C$
Operating and Storage Temperature Range	$T_j; T_{stg}$		-55 to +200	$^{\circ}C$

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

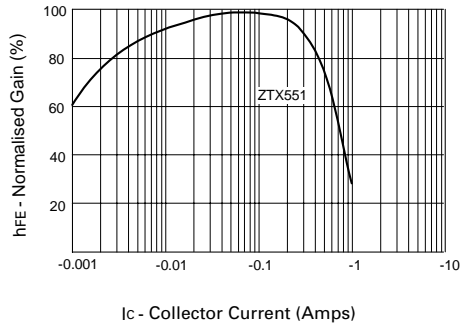
PARAMETER	SYMBOL	ZTX550		ZTX551		UNIT	CONDITIONS.
		MIN.	MAX.	MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-60		-80		V	$I_C = -100\mu A$
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	-45		-60		V	$I_C = -10mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		-5		V	$I_E = -100\mu A$
Collector Cut-Off Current	I_{CBO}		-0.1		-0.1	μA	$V_{CB} = -45V$ $V_{CE} = -60V$
Emitter Cut-Off Current	I_{EBO}		-0.1		-0.1	μA	$V_{EB} = -4V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.25		-0.35	V	$I_C = -150mA$, $I_B = -15mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.1		-1.1	V	$I_C = -150mA$, $I_B = -15mA^*$
Static Forward Current Transfer Ratio	h_{FE}	100 15	300	50 10	150		$I_C = -150mA$, $V_{CE} = -10V^*$ $I_C = -1A$, $V_{CE} = -10V^*$
Transition Frequency	f_T	150		150		MHz	$I_C = -50mA$, $V_{CE} = -10V$ $f = 100MHz$

ZTX550 ZTX551

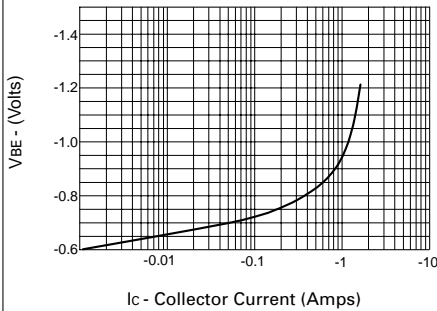
TYPICAL CHARACTERISTICS



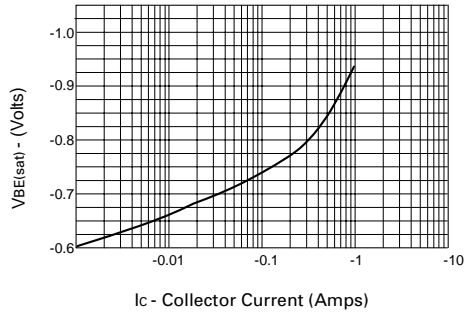
$V_{CE(sat)}$ v I_C



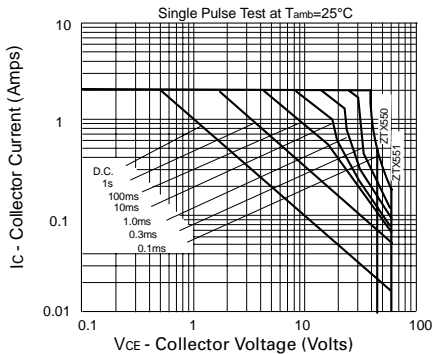
h_{FE} v I_C



$V_{BE(on)}$ v I_C



$V_{BE(sat)}$ v I_C



Safe Operating Area