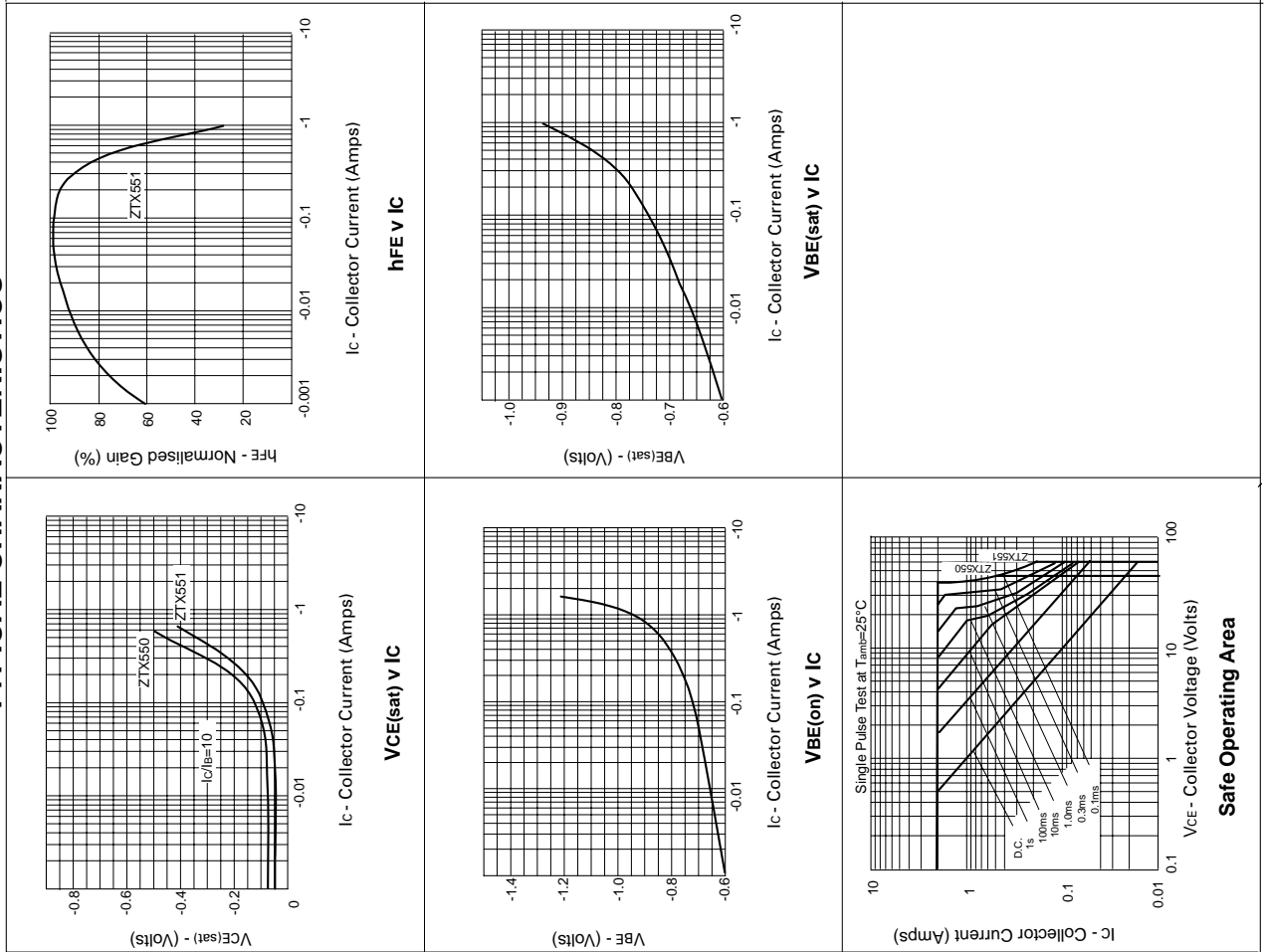


ZTX550 ZTX551

TYPICAL CHARACTERISTICS

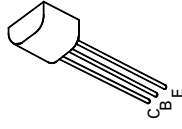


PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

ISSUE 1 – MARCH 94

FEATURES

- * 60 Volt V_{CEO}
- * 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	-5	V
Peak Pulse Current	I_{CM}	-2	-2	A
Continuous Collector Current	I_C	-1	-1	A
Power Dissipation: at $T_{amb} = 25^\circ C$ derate above $25^\circ C$	P_{tot}	1	5.7	W mW/°C
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +200		°C

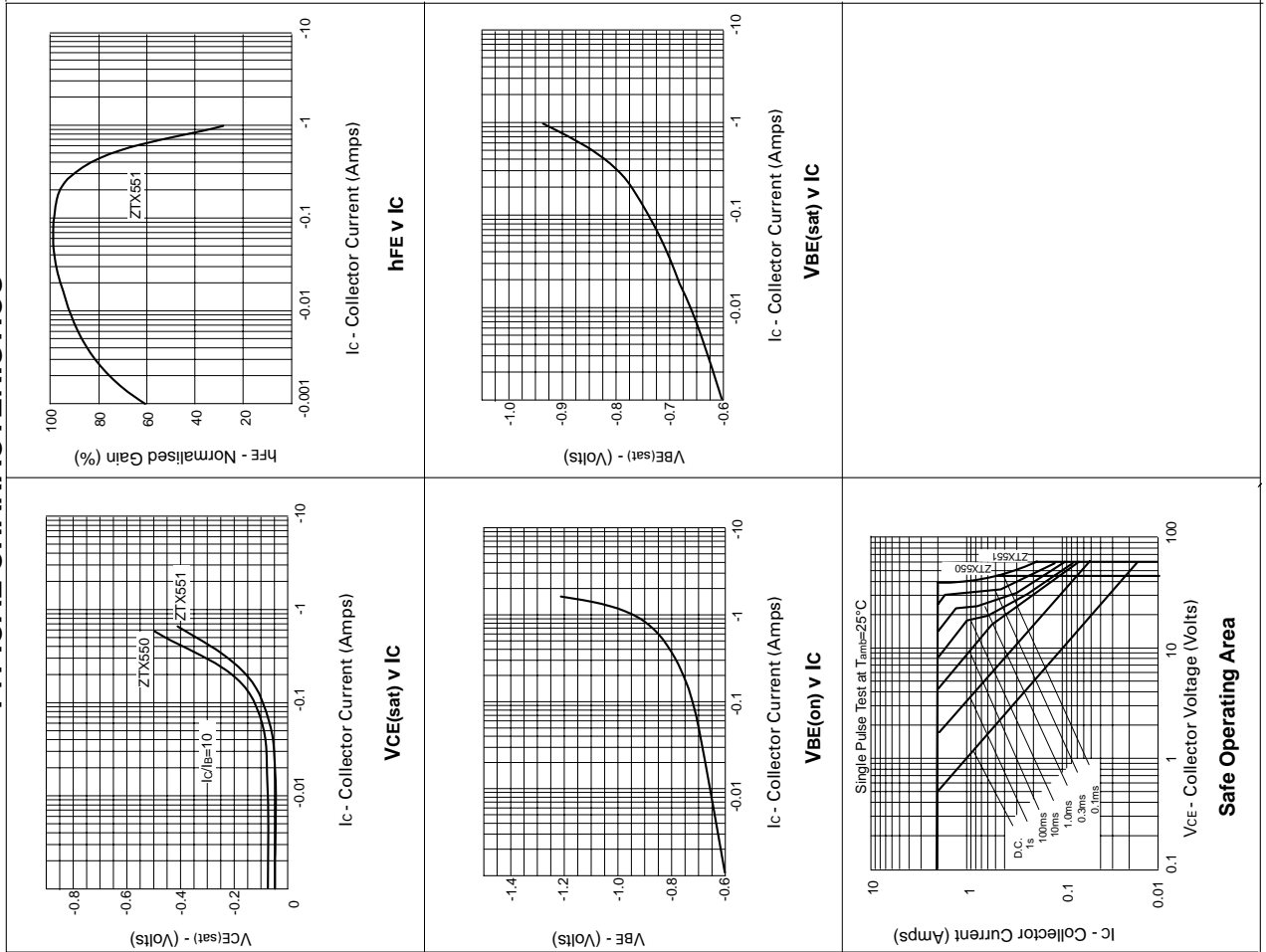
ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ C$).

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				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	150		MHz	$I_C = -50mA$, $V_{CE} = -10V$ $f = 100MHz$

ZTX550 ZTX551

ZTX550 ZTX551

TYPICAL CHARACTERISTICS

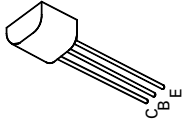


PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

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	-5	V
Peak Pulse Current	I_{CM}	-2	-2	A
Continuous Collector Current	I_C	-1	-1	A
Power Dissipation: at $T_{amb}=25^\circ\text{C}$ derate above 25°C	P_{tot}	1	5.7	W mW/°C
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +200		°C

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

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

ZTX550 ZTX551