



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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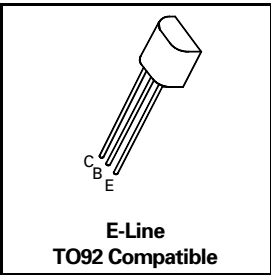
# PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

**ZTX550**  
**ZTX551**

**ISSUE 1 – MARCH 94**

## FEATURES

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



## ABSOLUTE MAXIMUM RATINGS.

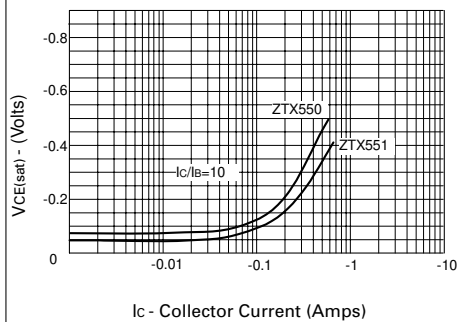
PARAMETER	SYMBOL	ZTX550	ZTX551	UNIT
Collector-Base Voltage	$V_{CBO}$	-60	-80	V
Collector-Emitter Voltage	$V_{CEO}$	-45	-60	V
Emitter-Base Voltage	$V_{EBO}$	-5		V
Peak Pulse Current	$I_{CM}$	-2		A
Continuous Collector Current	$I_C$	-1		A
Power Dissipation: at $T_{amb}=25^{\circ}C$ derate above $25^{\circ}C$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

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

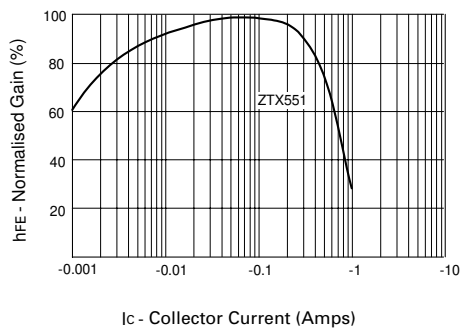
PARAMETER	SYMBOL	ZTX550		ZTX551		UNIT	CONDITIONS.
		MIN.	MAX.	MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-60		-80		V	$I_C = -100\mu A$
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	-45		-60		V	$I_C = -10mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		-5		V	$I_E = -100\mu A$
Collector Cut-Off Current	$I_{CBO}$		-0.1		-0.1	$\mu A$	$V_{CB} = -45V$ $V_{CE} = -60V$
Emitter Cut-Off Current	$I_{EBO}$		-0.1		-0.1	$\mu A$	$V_{EB} = -4V$
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

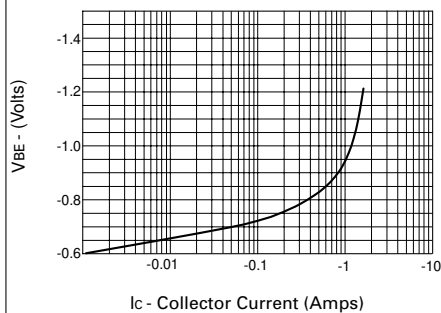
TYPICAL CHARACTERISTICS



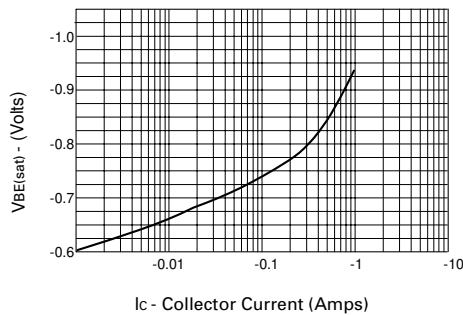
$V_{CE(sat)}$  v  $I_C$



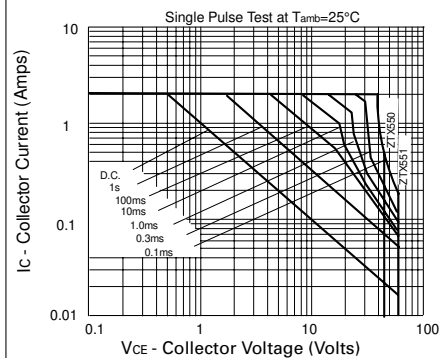
$h_{FE}$  v  $I_C$



$V_{BE(on)}$  v  $I_C$



$V_{BE(sat)}$  v  $I_C$



Safe Operating Area