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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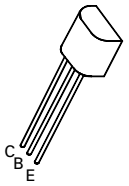
NPN SILICON PLANAR MEDIUM POWER TRANSISTORS

ISSUE 2 – MARCH 1994

ZTX450 ZTX451

FEATURES

* 60 Volt V_{CEO}
* 1 Amp continuous current
* P_{tot}= 1 Watt



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

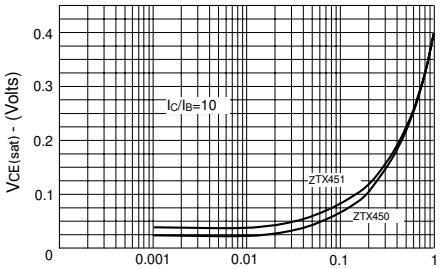
PARAMETER	SYMBOL	ZTX450	ZTX451	UNIT
Collector-Base Voltage	V_{CBO}	60	80	V
Collector-Emitter Voltage	V_{CEO}	45	60	V
Emitter-Base Voltage	V_{EBO}	5		V
Peak Pulse Current	I_{CM}	2		A
Continuous Collector Current	I_C	1		A
Power Dissipation at T_{amb}=25°C	P_{tot}	1		W
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +200		°C

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

PARAMETER	SYMBOL	ZTX450		ZTX451		UNIT	CONDITIONS.
		MIN.	MAX.	MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	60		80		V	I_C=100μA
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=100μA
Collector Cut-Off Current	I_{CBO}		0.1		0.1	μA μA	V_{CB}=45V V_{CB}=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
Output Capacitance	C_{obo}		15		15	pF	V_{CB}=10V, f=1MHz

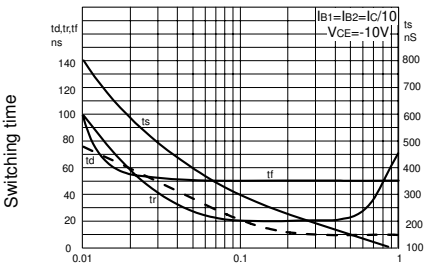
ZTX450
ZTX451

TYPICAL CHARACTERISTICS



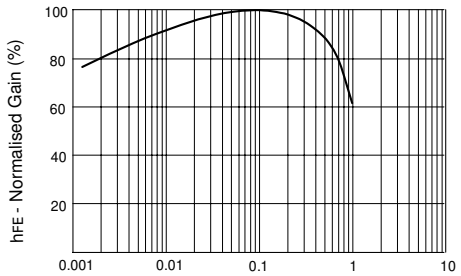
IC - Collector Current (Amps)

VCE(sat) v IC



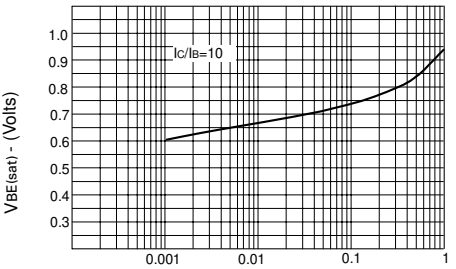
IC - Collector Current (Amps)

Typical Switching Speeds



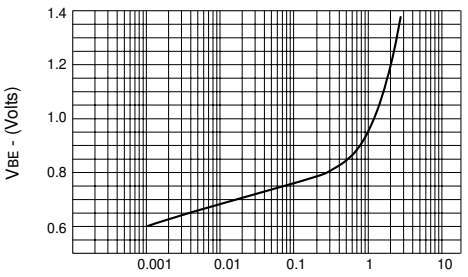
IC - Collector Current (Amps)

hFE v IC



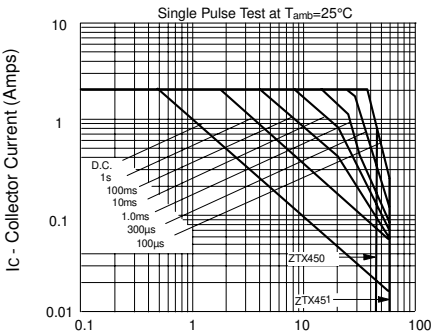
IC - Collector Current (Amps)

VBE(sat) v IC



IC - Collector Current (Amps)

VBE(on) v IC



VCE - Collector Voltage (Volts)

Safe Operating Area