THE ZTX552/ZTX553 ARE NOT RECOMMENDED FOR NEW DESIGNS.
PLEASE CONTACT US.

ZTX552/ZTX553

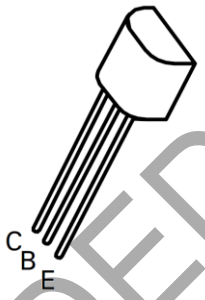
PNP SILICON PLANAR MEDIUM-POWER TRANSISTORS

Features

- 100 Volt V_{CEO}
- 1 Amp Continuous Current
- P_{tot} = 1 Watt
- **For automotive applications requiring specific change control (i.e. parts qualified to AEC-Q100/101/104/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please contact us or your local Diodes representative. https://www.diodes.com/quality/product-definitions/**

Pin Assignments

E-Line (TO92 Compatible)



Absolute Maximum Ratings

Parameter	Symbol	ZTX552	ZTX553	Unit
Collector-Base Voltage	V_{CBO}	-100	-120	V
Collector-Emitter Voltage	V_{CEO}	-80	-100	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 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 (@ T_{amb} = +25°C, unless otherwise stated.)

Parameter	Symbol	ZTX552		ZTX553		Unit	Conditions
		Min	Max	Min	Max		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-100	—	-120	—	V	I_C = -100µA
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	-80	—	-100	—	V	I_C = -10mA
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5	—	-5	—	V	I_E = -100µA
Collector Cutoff Current	I_{CBO}	— —	-0.1 —	— —	— -0.1	µA	V_{CB} = -80V V_{CB} = -100V
Emitter Cutoff Current	I_{EBO}	—	-0.1	—	-0.1	µA	V_{EB} = -4V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	—	-0.25	—	-0.25	V	I_C = -150mA, I_B = -15mA (Note 1)
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	—	-1.1	—	-1.1	V	I_C = -150mA, I_B = -15mA (Note 1)
Base-Emitter Turn-On Voltage	$V_{BE(on)}$	—	-1.0	—	-1.0	V	I_C = -150mA, V_{CE} = -10V (Note 1)
Static Forward Current Transfer Ratio	h_{FE}	40 10	150 —	40 10	200 —	—	I_C = -150mA, V_{CE} = -10V (Note 1) I_C = -1A, V_{CE} = -10V (Note 1)
Transition Frequency	f_T	150	—	150	—	MHz	I_C = -50mA, V_{CE} = -10V f = 100MHz
Output Capacitance	C_{obo}	—	12	—	12	pF	V_{CB} = -10V, f = 1MHz

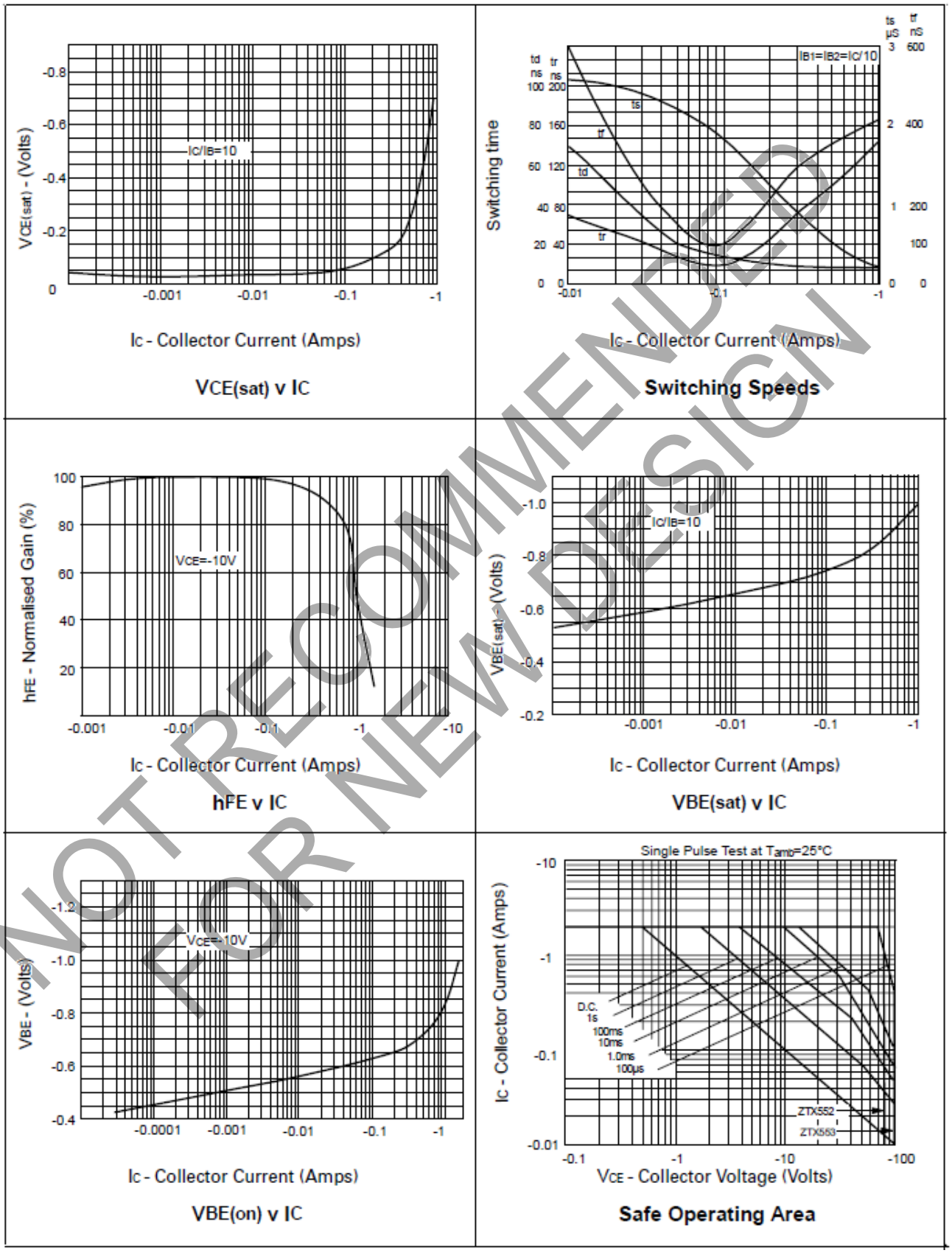
Note: 1. Measured under pulsed conditions. Pulse width = 300µs. Duty cycle ≤ 2%.

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Typical Characteristics



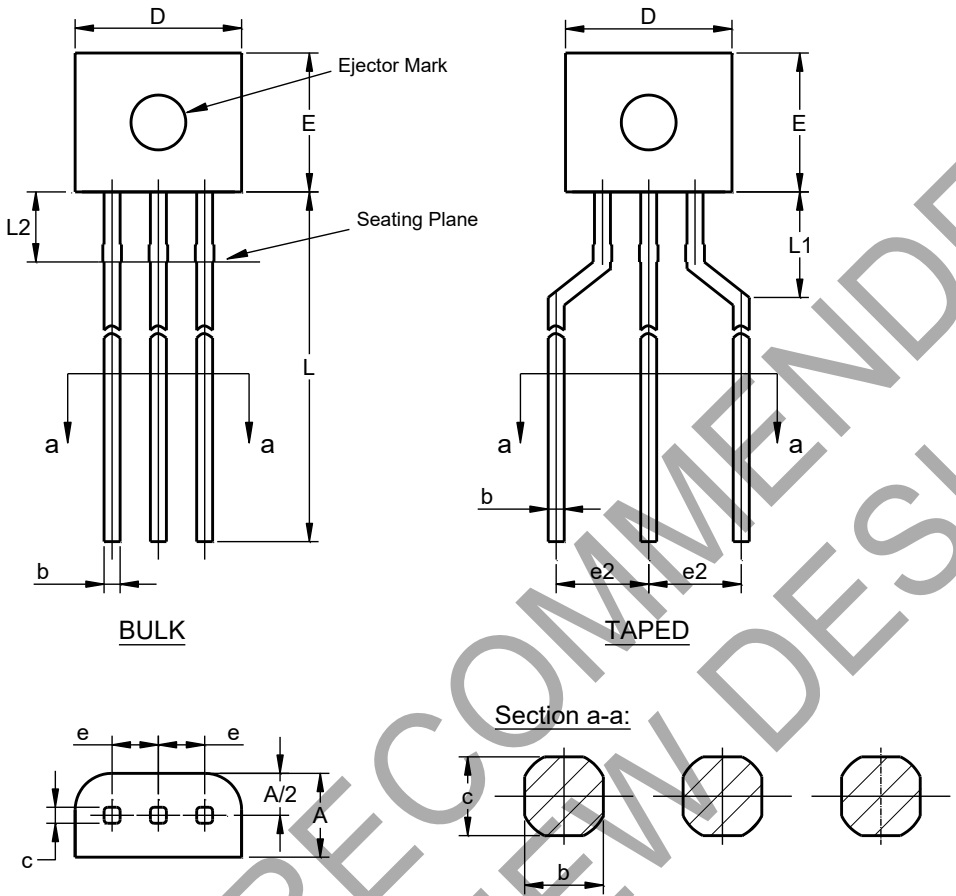
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Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.

E-Line



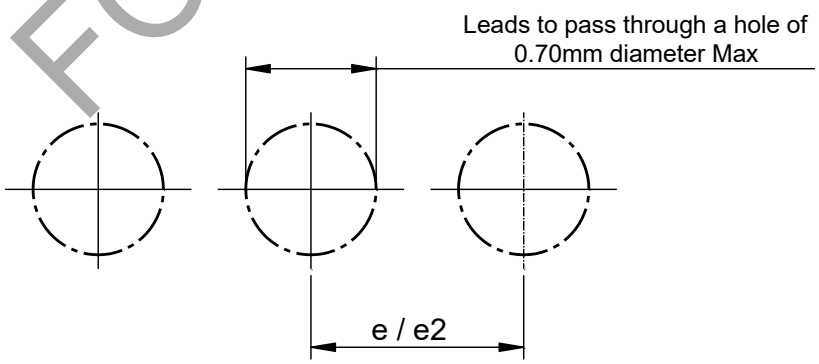
E-Line			
Dim	Min	Max	Typ
A	2.16	2.41	2.28
b	0.41	0.49	0.44
c	0.41	0.49	0.44
D	4.37	4.77	4.57
E	3.61	4.01	3.90
e	1.27 REF		
e2	2.54 REF		
L	13.00	13.97	13.50
L1	2.50	3.50	--
L2	--	--	2.50
All Dimensions in mm			

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Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.

E-Line



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