

## E-LINE PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

### FEATURES

- Excellent  $h_{FE}$  characteristics up to  $I_C=50\text{mA}$
- Low Saturation voltages

### PARTMARKING

ZTX  
560



E-LINE

### ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Collector-base voltage	$V_{CBO}$	-500	V
Collector-emitter voltage	$V_{CEO}$	-500	V
Emitter-base voltage	$V_{EBO}$	-5	V
Peak pulse current	$I_{CM}$	-500	mA
Continuous collector current	$I_C$	-150	mA
Power dissipation	$P_{tot}$	1	W
Operating and storage temperature range	$T_j; T_{stg}$	-55 to +150	°C

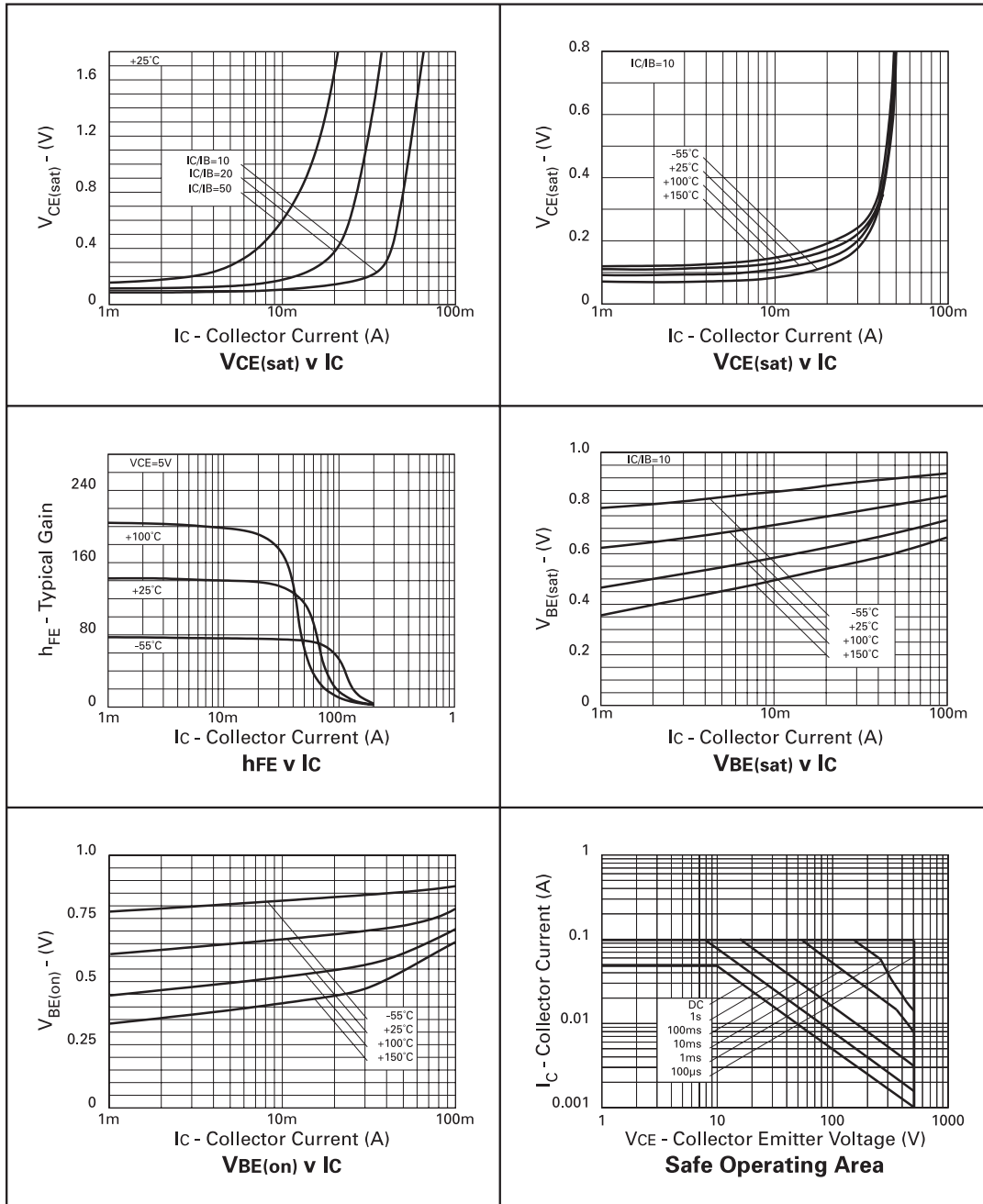
### ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$ )

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS
Collector-base breakdown voltage	$V_{(BR)CBO}$	-500		V	$I_C = -100\mu\text{A}$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	-500		V	$I_C = -10\text{mA}^*$
Emitter-base breakdown voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu\text{A}$
Collector cut-off current	$I_{CBO}; I_{CES}$		-100	nA	$V_{CB} = -500\text{V}; V_{CE} = -500\text{V}$
Emitter cut-off current	$I_{EBO}$		-100	nA	$V_{EB} = -5\text{V}$
Collector-emitter saturation voltage	$V_{CE(sat)}$		-0.2 -0.5	V	$I_C = -20\text{mA}, I_B = -2\text{mA}^*$ $I_C = -50\text{mA}, I_B = -10\text{mA}^*$
Base-emitter saturation voltage	$V_{BE(sat)}$		-0.9	V	$I_C = -50\text{mA}, I_B = -10\text{mA}^*$
Base-emitter turn on voltage	$V_{BE(on)}$		-0.9	V	$I_C = -50\text{mA}, V_{CE} = -10\text{V}^*$
Static forward current transfer ratio	$h_{FE}$	100 80 15 typ	300 300		$I_C = -1\text{mA}, V_{CE} = -10\text{V}$ $I_C = -50\text{mA}, V_{CE} = -10\text{V}^*$ $I_C = -100\text{mA}, V_{CE} = -10\text{V}^*$
Transition frequency	$f_T$	60		MHz	$V_{CE} = -20\text{V}, I_C = -10\text{mA}, f = 50\text{MHz}$
Output capacitance	$C_{obo}$		8	pF	$V_{CB} = -20\text{V}, f = 1\text{MHz}$
Switching times	$t_{on}$ $t_{off}$	110 typ. 1.5 typ.		ns $\mu\text{s}$	$V_{CE} = -100\text{V}, I_C = -50\text{mA}, I_{B1} = -5\text{mA}, I_{B2} = 10\text{mA}$

\* Measured under pulsed conditions. Pulse width=300 $\mu\text{s}$ . Duty cycle  $\leq 2\%$

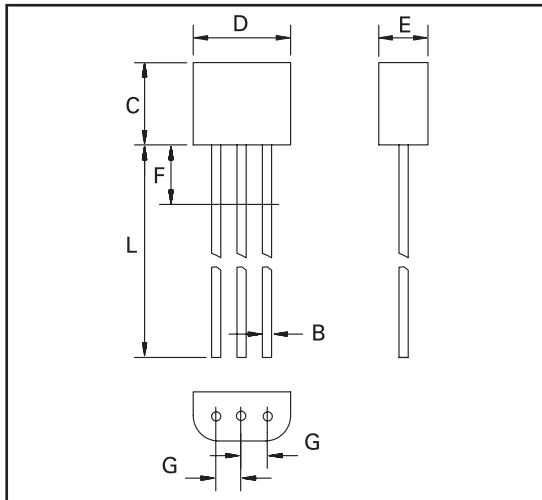
# ZTX560

## TYPICAL CHARACTERISTICS



# ZTX560

## PACKAGE OUTLINE



## PACKAGE DIMENSIONS

DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.41	0.495	0.016	0.0195
B	0.41	0.495	0.016	0.0195
C	3.61	4.01	0.142	0.158
D	4.37	4.77	0.172	0.188
E	2.16	2.41	0.085	0.095
F	—	2.50	—	0.098
G	1.27 NOM		0.050 NOM	
L	13.00	13.97	0.512	0.550

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ISSUE 1 - DECEMBER 2005