ZTX560

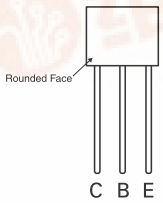
E-LINE PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

FEATURES

- Excellent h_{FE} characterisristics up to I_C=50mA
- Low Saturation voltages

PARTMARKING

ZTX
560



PIN-OUT

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°C)

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

* Measured under pulsed conditions. Pulse width=300µs. Duty cycle ≤2%

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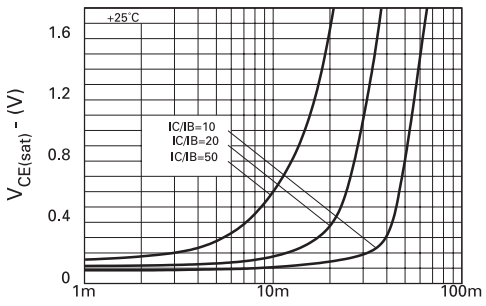
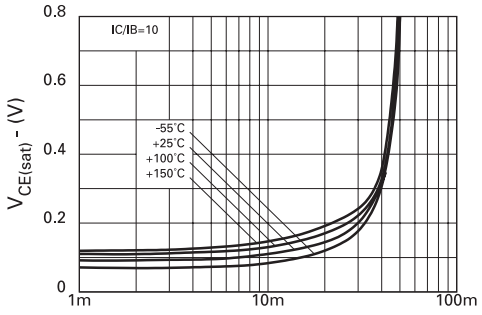
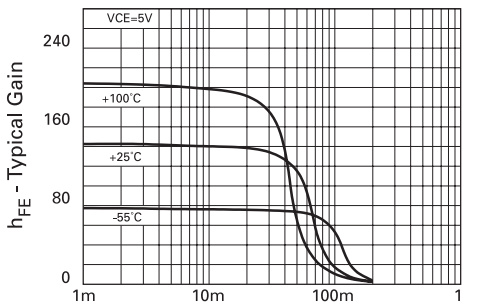
TYPICAL CHARACTERISTICS



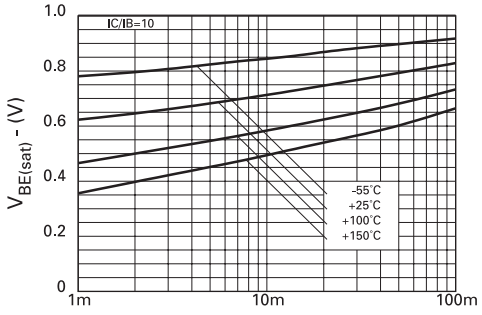
VCE(sat) v IC



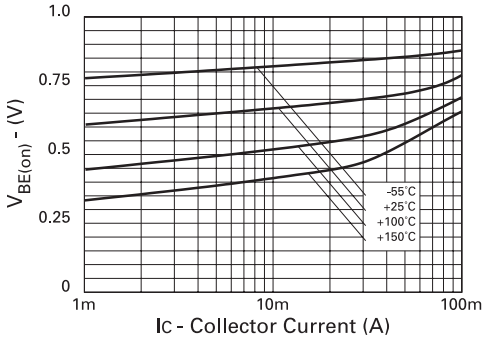
VCE(sat) v IC



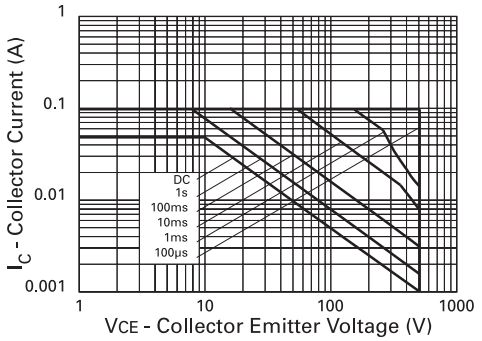
hFE v IC



VBE(sat) v IC

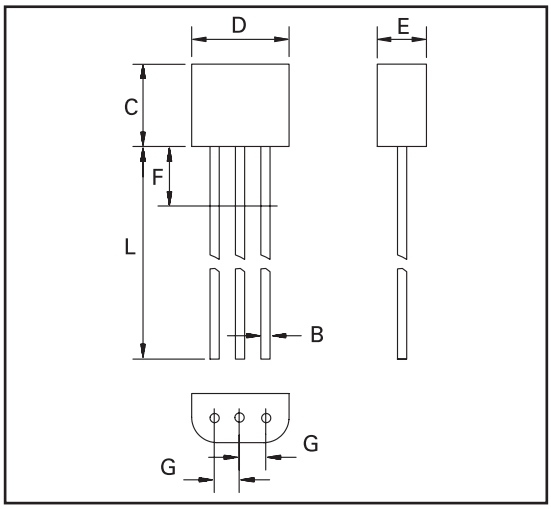


VBE(on) v IC



Safe Operating Area

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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