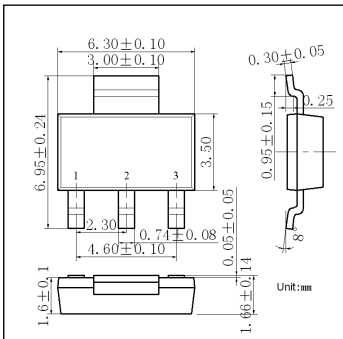
FZT955

PNP silicon planar high current (high performance) transistors



1.Base

2.Collector

3.Emitter

Features

- 4 Amps continuous current (10 Amps peak current)
- Very low saturation voltages.
- Excellent gain characteristics specified up to 3 Amps.
- P_{tot} = 3 watts.

Absolute Maximum Ratings

Symbol	Parameter	Value	Unit
V_{CEO}	Collector Emitter Voltage	-140	V
V_{CBO}	Collector Base Voltage	-180	V
V_{EBO}	Emitter Base Voltage	-6	V
I_{CM}	Peak Pulse Current	-10	A
I_C	Continuous Collector Current	-4	A
P_{tot}	Power Dissipation at T_{amb} =25°C	3	W
T_j:T_{stg}	Operating and Storage Temperature Range	- 55 to +150	°C

*The power which can be dissipated assuming the device is mounted in a typical manner on a P.C.B. with copper equal to 4 square inch minimum

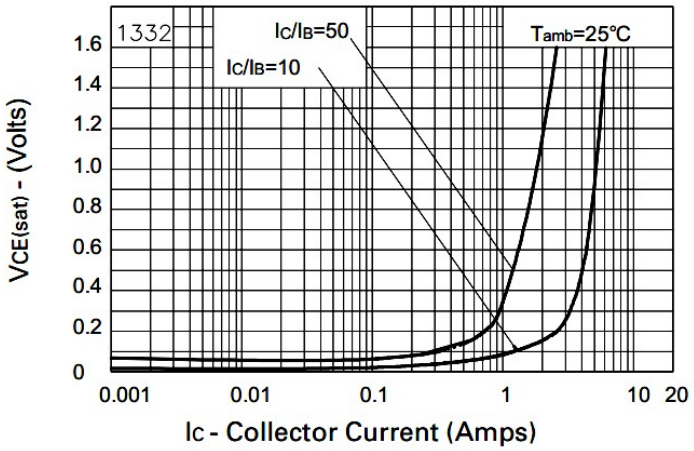
Electrical Characteristics (T_{amb}=25°C unless otherwise stated)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=-100μA,I_E=0	-180	-210		V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=-10mA*,I_B=0	-140	-170		V
$V_{(BR)CER}$	Collector-emitter breakdown voltage	I_C =-1μA, RB≤1kΩ	-180	-210		
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=-100μA,I_C=0	-6	-8		V
I_{CBO}	Collector cut-off current	V_{CB}=-150V,			-50	nA
		V_{CB}=-150V, T_{amb} =100° C			-1	μA
I_{CER} R≤1kΩ	Collector Cut-Off Current	V_{CB} =-150V			-50	nA
		V_{CB}=-150V, T_{amb} =100° C			-1	μA
I_{EBO}	Emitter cut-off current	V_{EB}=-6V			-10	nA
$h_{FE(1)}$	Static forward current transfer ratio	V_{CE}=-5V*, I_C=-10mA	100	200		
$h_{FE(2)}$		V_{CE}=-5V*, I_C=-1A	100	200	300	
$h_{FE(3)}$		V_{CE}=-5V*, I_C=-3A	75	140		
$h_{FE(4)}$		V_{CE}=-5V*, I_C=-10A		10		
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=-100mA,I_B=-10mA*		-30	-60	mV
		I_C=-500mA,I_B=-50mA*		-70	-120	mV
		I_C=-1A,I_B=-100mA*		-110	-150	mV
		I_C=-3A,I_B=-300mA*		-275	-370	mV
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C=-3A,I_B=-300mA*		-970	-1110	mV
$V_{BE(on)}$	Base-Emitter Turn-On Voltage	I_C =-3A, V_{CE}=-5V*		-830	-950	mV
f_T	Transition frequency	V_{CE}=-10V,I_C=-100mA,f=50MHz		110		MHz
C_{obo}	Output capacitance	V_{CB}=-20V, f=1MHz		40		pF
t_{on}	Switching Times	I_C =-1A, V_{CC} = -50V		68		ns
t_{off}		I_{B1} =-100mA,I_{B2} = 200mA		1030		ns

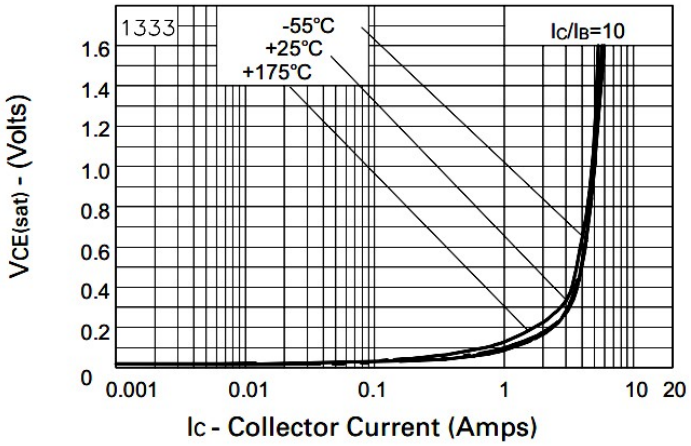
*Measured under pulsed conditions. Pulse Width=300μs. Duty cycle ≤2%

Spice parameter data is available upon request for this device

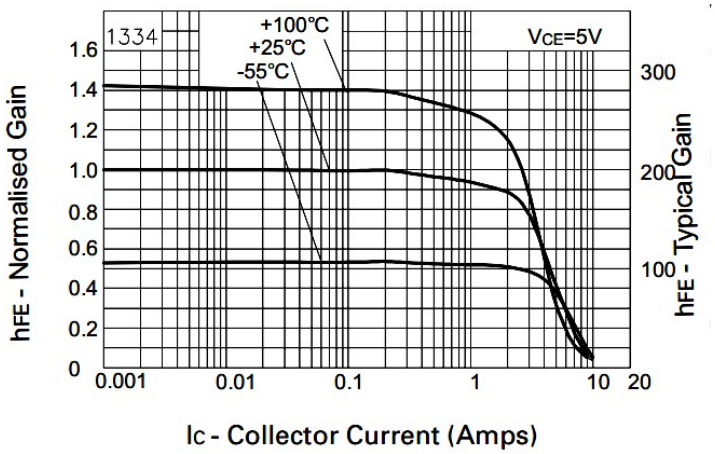
Typical Characteristics



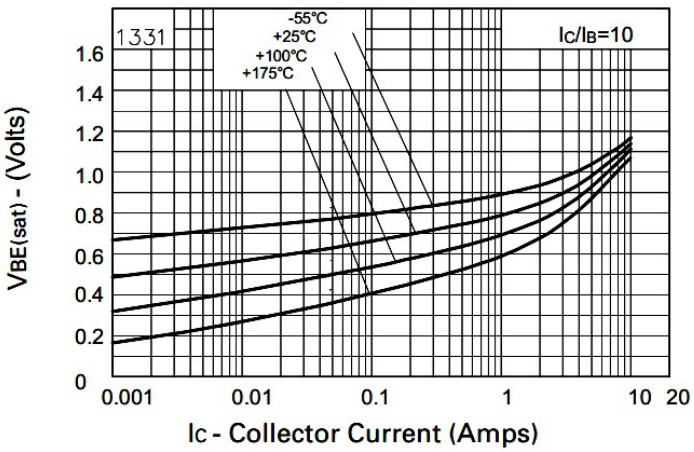
VCE(sat) v IC



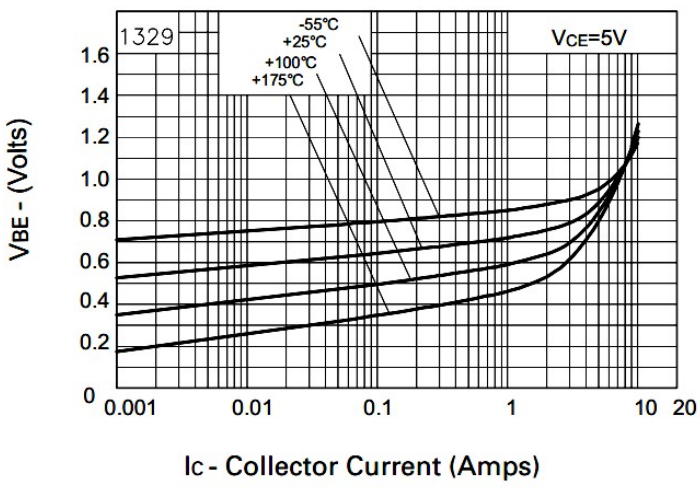
VCE(sat) v IC



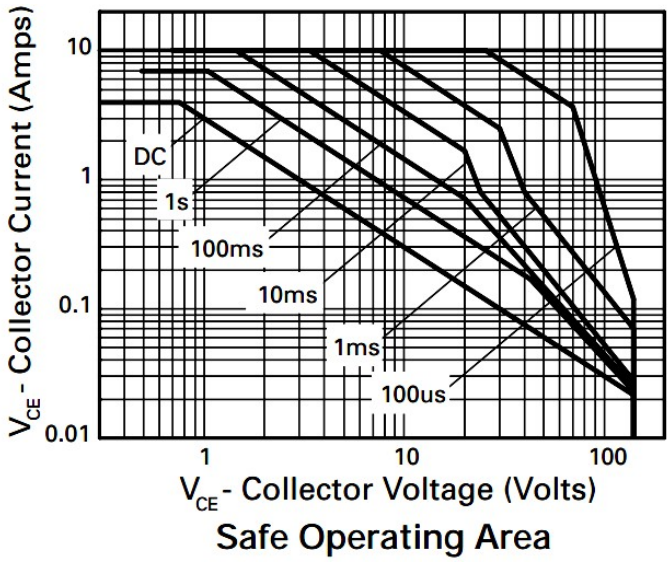
hFE v IC



V BE(sat) v IC



VBE(on) v IC



Safe Operating Area

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