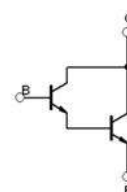
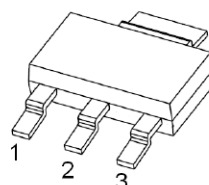


**NPN Plastic-Encapsulate Transistor****PRIMARY CHARACTERISTICS**

P_C	1W
V_{CEO}	100V
I_C	5A
$V_{CE(sat)}$	4V
$T_{J,Max}$	150°C

**SCHEMATIC DIAGRAM
SOT-223 PACKAGE**

1. BASE
2. COLLECTOR
3. EMITTER

FEATURES

- Complementary to CZT127
- Silicon Power Darlington Transistors
- Low speed switching and amplifier applications

MECHANICAL DATA

- Case : Molded plastic,SOT-223
- Polarity : Shown above
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	5	A
P_C	Collector Power Dissipation	1	W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~150	°C

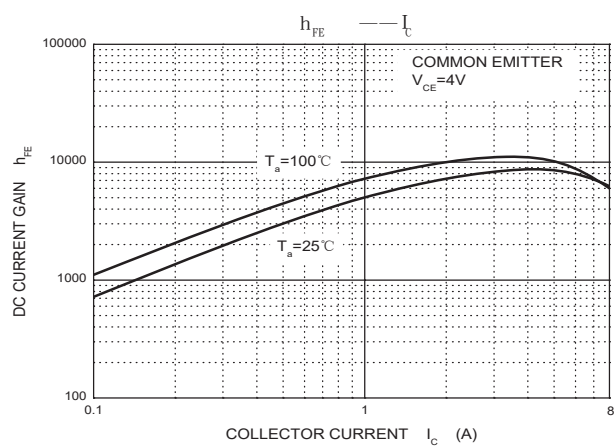
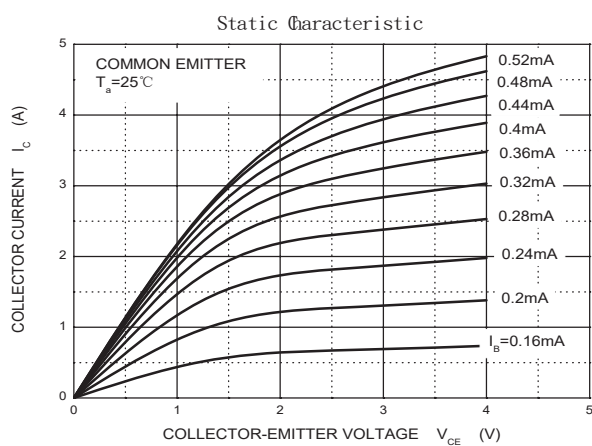


NPN Plastic-Encapsulate Transistor

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

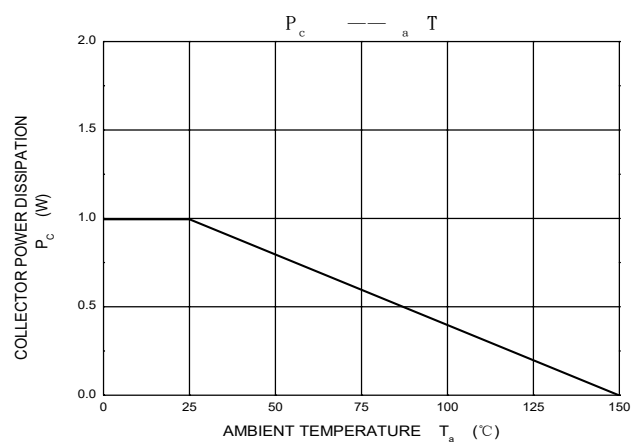
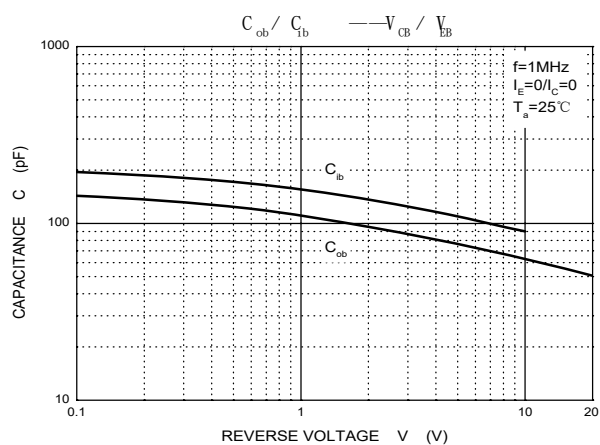
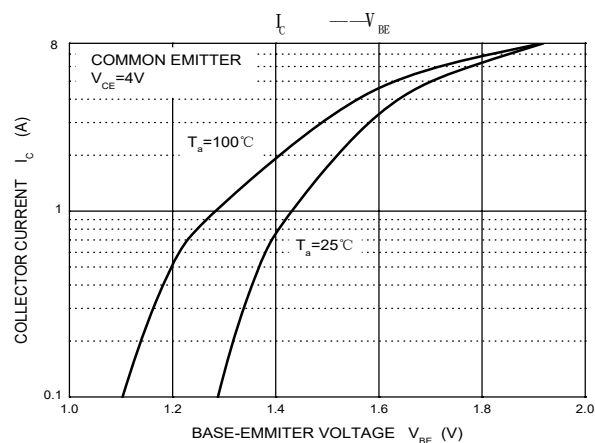
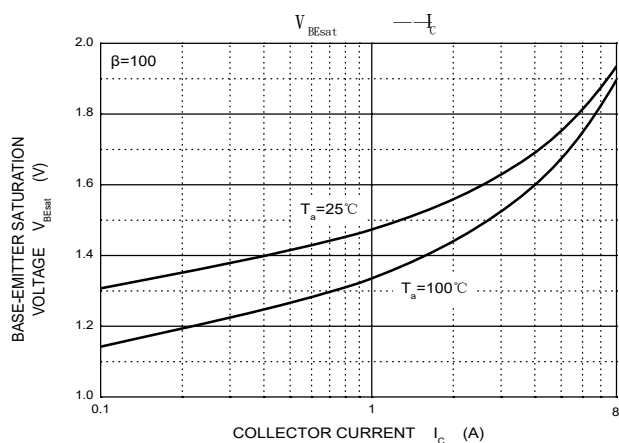
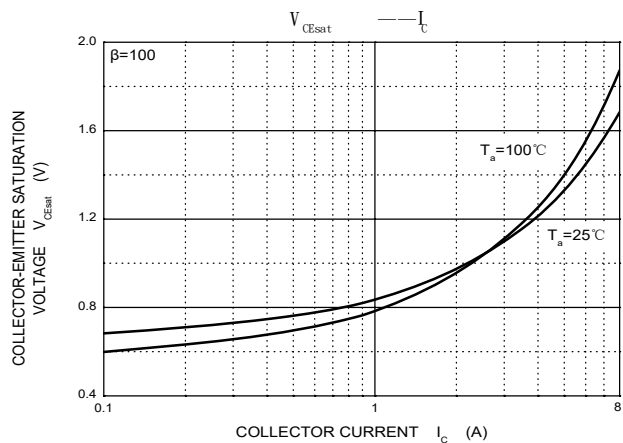
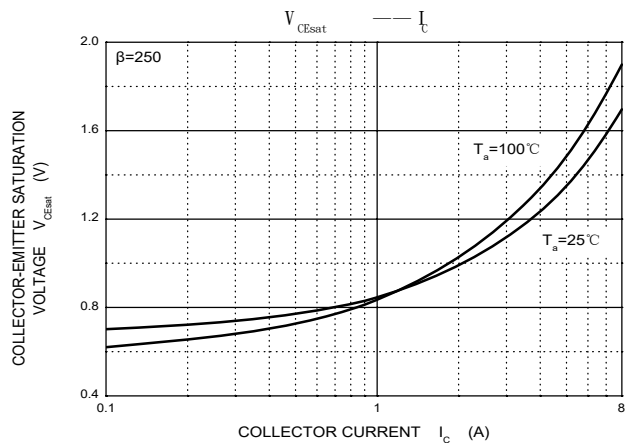
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1\text{mA}, I_E=0$	100			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=30\text{mA}, I_B=0$	100			V
Collector cut-off current	I_{CBO}	$V_{CB}=100\text{V}, I_E=0$			200	μA
Base cut-off current	I_{CEO}	$V_{CE}=50\text{V}, I_B=0$			500	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			2	mA
DC current gain	$h_{FE(1)}$	$V_{CE}=3\text{V}, I_C=0.5\text{A}$	1000			
	$h_{FE(2)}$	$V_{CE}=3\text{V}, I_C=3\text{A}$	1000			
Collector-emitter saturation voltage	$V_{CE(sat)1}$	$I_C=3\text{A}, I_B=12\text{mA}$			2	V
	$V_{CE(sat)2}$	$I_C=5\text{A}, I_B=20\text{mA}$			4	V
Base-emitter voltage	$V_{BE(on)}$	$V_{CE}=3\text{V}, I_C=3\text{A}$			2.5	V
Transition frequency	f_T	$V_{CE}=4\text{V}, I_C=3\text{A}, f=1\text{MHz}$	4			MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$			200	pF

Typical Characteristics





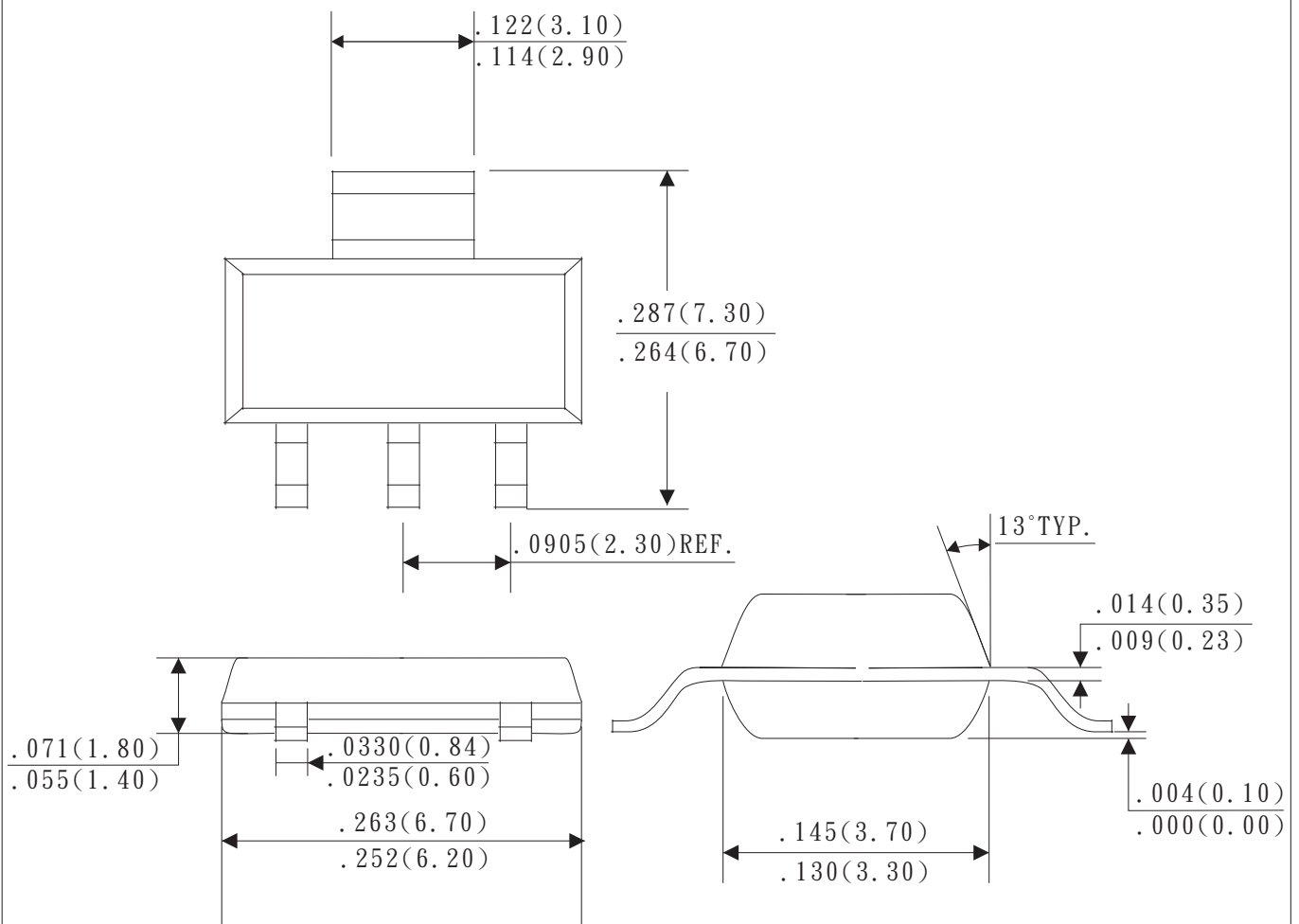
NPN Plastic-Encapsulate Transistor





Outline Drawing

SOT-223



Dimensions in inches and (millimeters)

Rev.C

**Ordering Information:**

Device PN	Packing
CZT122 -T ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	Tape&Reel: 2.5 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

(3) WS : Willas brand abbreviation, Label Type does not display

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