

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

### FEATURES

- High Voltage Amplifier Application
- High Voltage

### MARKING

ZT5551

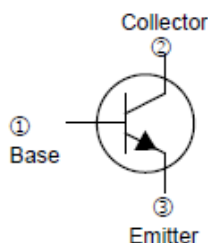
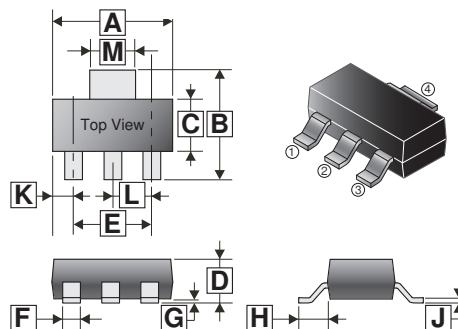
### PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-223	2.5K	13 inch

### ORDER INFORMATION

Part Number	Type
CZT5551-C	Lead (Pb)-free and Halogen-free

### SOT-223



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	5.90	6.70	G	-	0.18
B	6.70	7.30	H	2.00	REF.
C	3.30	3.80	J	0.20	0.40
D	1.42	1.90	K	1.10	REF.
E	4.45	4.75	L	2.30	REF.
F	0.60	0.85	M	2.80	3.20

### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V <sub>CB0</sub>	180	V
Collector-Emitter Voltage	V <sub>CEO</sub>	160	V
Emitter-Base Voltage	V <sub>EBO</sub>	6	V
Collector Current-Continuous	I <sub>C</sub>	600	mA
Collector Power Dissipation	P <sub>D</sub>	1	W
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	125	°C/W
Junction and Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	150, -55~150	°C

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	V <sub>(BR)CBO</sub>	180	-	-	V	I <sub>C</sub> =100μA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	160	-	-	V	I <sub>C</sub> =1mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	6	-	-	V	I <sub>C</sub> =0, I <sub>E</sub> =10μA
Collector Cut-Off Current	I <sub>CBO</sub>	-	-	50	nA	V <sub>CB</sub> =120V, I <sub>E</sub> =0
Emitter Cut-Off Current	I <sub>EBO</sub>	-	-	50	nA	V <sub>EB</sub> =4V, I <sub>C</sub> =0
DC Current Gain	h <sub>FE1</sub>	80	-	-		V <sub>CE</sub> =5V, I <sub>C</sub> =1mA
	h <sub>FE2</sub>	80	-	250		V <sub>CE</sub> =5V, I <sub>C</sub> =10mA
	h <sub>FE3</sub>	30	-	-		V <sub>CE</sub> =5V, I <sub>C</sub> =50mA
Collector-Emitter Saturation Voltage	V <sub>CE(sat)1</sub>	-	-	0.15	V	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA
	V <sub>CE(sat)2</sub>	-	-	0.2		I <sub>C</sub> =50mA, I <sub>B</sub> =5mA
Base-Emitter Saturation Voltage	V <sub>BE(sat)1</sub>	-	-	1	V	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA
	V <sub>BE(sat)2</sub>	-	-	1		I <sub>C</sub> =50mA, I <sub>B</sub> =5mA
Transition Frequency	f <sub>T</sub>	100	-	300	MHz	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA, f=100MHz
Collector Capacitance	C <sub>ob</sub>	-	6	-	pF	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz
Emitter Capacitance	C <sub>ib</sub>	-	20	-	pF	V <sub>CB</sub> =0.5V, I <sub>C</sub> =0, f=1MHz

**CHARACTERISTIC CURVES**

