

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

### FEATURES

- Complementary to CZT32C
- Power amplifier applications up to 3 Amps.

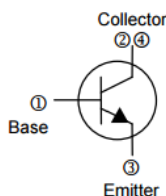
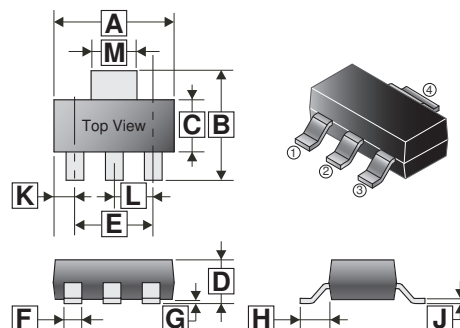
### MARKING

CZT31C

### PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-223	2.5K	13 inch

### 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	Rating	Unit
Collector-Base Voltage	V <sub>CBO</sub>	100	V
Collector-Emitter Voltage	V <sub>CEO</sub>	100	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current-Continuous	I <sub>C</sub>	3	A
Collector Power Dissipation	P <sub>D</sub>	1	W
Junction and Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	150, -65~150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector-Base Breakdown Voltage	V <sub>(BR)CBO</sub>	100	-	-	V	I <sub>C</sub> =1mA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	100	-	-	V	I <sub>C</sub> =30mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	5	-	-	V	I <sub>C</sub> =0, I <sub>E</sub> =3mA
Collector Cut-off Current	I <sub>CBO</sub>	-	-	200	uA	V <sub>CB</sub> =100V, I <sub>E</sub> =0
Base Cut-off Current	I <sub>CEO</sub>	-	-	300	uA	V <sub>CE</sub> =60V, I <sub>B</sub> =0
Emitter Cut-off Current	I <sub>EBO</sub>	-	-	1	mA	V <sub>EB</sub> =5V, I <sub>C</sub> =0
DC Current Gain <sup>1</sup>	h <sub>FE(1)</sub>	25	-	-		V <sub>CE</sub> =4V, I <sub>C</sub> =1A
	h <sub>FE(2)</sub>	10	-	100		V <sub>CE</sub> =4V, I <sub>C</sub> =3A
Collector-Emitter Saturation Voltage <sup>1</sup>	V <sub>CE(sat)</sub>	-	-	1.2	V	I <sub>C</sub> =3A, I <sub>B</sub> =375mA
Base-Emitter Voltage <sup>1</sup>	V <sub>BE(on)</sub>	-	-	1.8	V	V <sub>CE</sub> =4V, I <sub>C</sub> =3A
Transition Frequency	f <sub>T</sub>	3	-	-	MHZ	V <sub>CE</sub> =10V, I <sub>C</sub> =0.5A, f=1MHZ

Note:

1. Pulsed, 2%D.C.

**TYPICAL CHARACTERISTICS**

