

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

FEATURES

- Complementary to CZT32C
- Power Amplifier Applications Up to 3 Amps.

MARKING

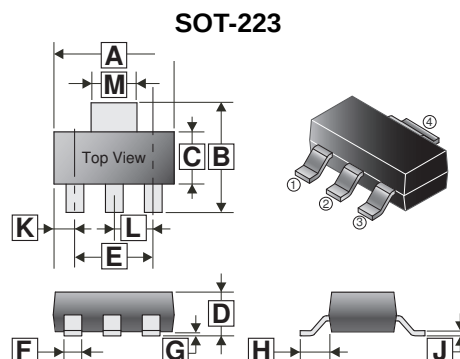
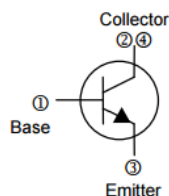
CZT31C

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-223	2.5K	13 inch

ORDER INFORMATION

Part Number	Type
CZT31C-C	Lead (Pb)-free and Halogen-free



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 ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V_{CEO}	100	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current-Continuous	I_C	3	A
Collector Power Dissipation	P_D	1	W
Junction and Storage Temperature	T_J, T_{STG}	150, -65~150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	100	-	-	V	$I_C=1\text{mA}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	100	-	-	V	$I_C=30\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	$I_C=0, I_E=3\text{mA}$
Collector Cut-off Current	I_{CBO}	-	-	200	μA	$V_{CB}=100\text{V}, I_E=0$
Base Cut-off Current	I_{CEO}	-	-	300	μA	$V_{CE}=60\text{V}, I_B=0$
Emitter Cut-off Current	I_{EBO}	-	-	1	mA	$V_{EB}=5\text{V}, I_C=0$
DC Current Gain ¹	$h_{FE(1)}$	25	-	-		$V_{CE}=4\text{V}, I_C=1\text{A}$
	$h_{FE(2)}$	10	-	100		$V_{CE}=4\text{V}, I_C=3\text{A}$
Collector-Emitter Saturation Voltage ¹	$V_{CE(sat)}$	-	-	1.2	V	$I_C=3\text{A}, I_B=375\text{mA}$
Base-Emitter Voltage ¹	$V_{BE(on)}$	-	-	1.8	V	$V_{CE}=4\text{V}, I_C=3\text{A}$
Transition Frequency	f_T	3	-	-	MHz	$V_{CE}=10\text{V}, I_C=0.5\text{A}, f=1\text{MHz}$

Note:

- Pulsed, 2%D.C.

CHARACTERISTIC CURVES

