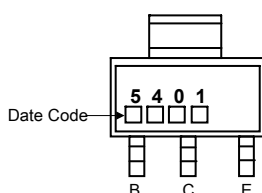
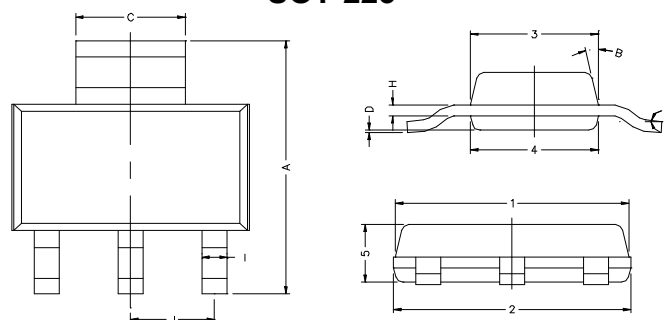


RoHS Compliant Product

SOT-223

Description

The CZT5401 is designed for general purpose applications requiring high breakdown voltages.



REF.	Min.	Max.	REF.	Min.	Max.
A	6.70	7.30	B	13 TYP.	
C	2.90	3.10	J	2.30 REF.	
D	0.02	0.10	1	6.30	6.70
E	0°	10°	2	6.30	6.70
I	0.60	0.80	3	3.30	3.70
H	0.25	0.35	4	3.30	3.70
			5	1.40	1.80

MAXIMUM RATINGS* ($T_{amb}=25^{\circ}\text{C}$, unless otherwise specified)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-600	mA
P_D	Total Power Dissipation	1.5	W
T_J, T_{stg}	Junction and Storage Temperature	-55~-150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS $T_{amb}=25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	MIN	TYP	MAX	UNIT	Test conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	-160	—	—	V	$I_C = -100\mu\text{A}, I_E = 0$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	-150	—	—	V	$I_C = -1\text{mA}, I_B = 0$
Emitter-base breakdown voltage	$V_{(BR)EBO}$	-5	—	—	V	$I_E = -10\mu\text{A}, I_C = 0$
Collector cut-off current	I_{CBO}	—	—	-50	nA	$V_{CB} = -120\text{V}, I_E = 0$
Emitter cut-off current	I_{EBO}	—	—	-50	nA	$V_{EB} = -3\text{V}, I_C = 0$
DC current gain	h_{FE1}	50	—	—	—	$V_{CE} = -5\text{V}, I_C = -1\text{mA}$
	h_{FE2}	80	160	400	—	$V_{CE} = -5\text{V}, I_C = -10\text{mA}$
	h_{FE3}	50	—	—	—	$V_{CE} = -5\text{V}, I_C = -50\text{mA}$
Collector-emitter saturation voltage	$V_{CE(sat)1}$	—	—	-200	mV	$I_C = -10\text{mA}, I_B = -1\text{mA}$
	$V_{CE(sat)2}$	—	—	-500	mV	$I_C = -50\text{mA}, I_B = -5\text{mA}$
Base-emitter saturation voltage	$V_{BE(sat)1}$	—	—	-1	V	$I_C = -10\text{mA}, I_B = -1\text{mA}$
	$V_{BE(sat)2}$	—	—	-1	V	$I_C = -50\text{mA}, I_B = -5\text{mA}$
Transition frequency	f_T	100	—	300	MHz	$V_{CE} = -10\text{V}, I_C = -10\text{mA}, f = 100\text{MHz}$
Collector output capacitance	C_{ob}	—	—	6	pF	$V_{CB} = -10\text{V}, f = 1\text{MHz}, I_E = 0$

CLASSIFICATION OF h_{FE}

Rank	A	N	C
Range	80-200	100-240	160-400

Characteristics Curve

