

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

DESCRIPTION

Epitaxial Planar Die Construction.

MARKING

ZT2222A

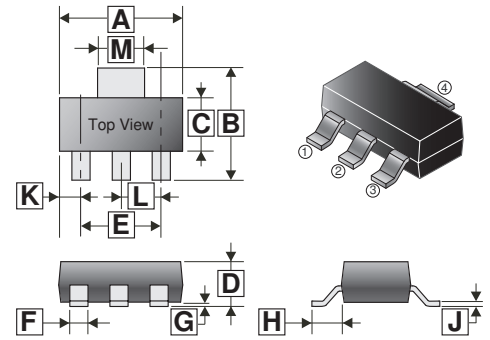
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-223	2.5K	13 inch

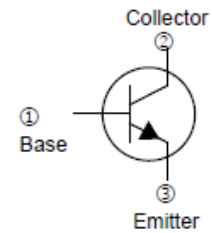
ORDER INFORMATION

Part Number	Type
PZT2222A-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



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

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V_{CBO}	75	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	6	V
Continuous Collector Current	I_C	600	mA
Collector Power Dissipation	P_D	1	W
Junction and Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	75	-	-	V	$I_C=10\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	40	-	-	V	$I_C=10\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	6	-	-	V	$I_E=10\mu\text{A}, I_C=0$
Collector Cut-off Current	I_{CBO}	-	-	10	nA	$V_{CB}=60\text{V}, I_E=0$
Emitter Cut-off Current	I_{CEX}	-	-	10	nA	$V_{CE}=60\text{V}, V_{BE(off)}=-3\text{V}$
Collector Cut-off current	I_{EBO}	-	-	10	nA	$V_{EB}=3\text{V}, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	1	V	$I_C=500\text{mA}, I_B=50\text{mA}$
		-	-	0.3	V	$I_C=150\text{mA}, I_B=15\text{mA}$
Base-Emitter Voltage	$V_{BE(sat)}$	-	-	2	V	$I_C=500\text{mA}, I_B=50\text{mA}$
		-	-	1.2	V	$I_C=150\text{mA}, I_B=15\text{mA}$
DC Current Gain	h_{FE}	35	-	-		$V_{CE}=10\text{V}, I_C=100\mu\text{A}$
		50	-	-		$V_{CE}=10\text{V}, I_C=1\text{mA}$
		75	-	-		$V_{CE}=10\text{V}, I_C=10\text{mA}$
		100	-	300		$V_{CE}=10\text{V}, I_C=150\text{mA}$
		50	-	-		$V_{CE}=1\text{V}, I_C=150\text{mA}$
		40	-	-		$V_{CE}=10\text{V}, I_C=500\text{mA}$
Transition Frequency	f_T	300	-	-	MHz	$V_{CE}=20\text{V}, I_C=20\text{mA}, f=100\text{MHz}$ $f=100\text{MHz}$
Collector Output Capacitance	C_{OB}	-	8	-	pF	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$

CHARACTERISTIC CURVES

Static Characteristic

