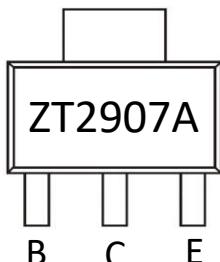


Features

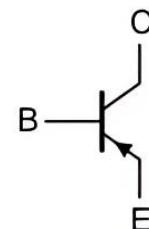
- Epitaxial planar die construction
- Complementary PNP Type available
(PZT2907A)



Marking and pin assignment



SOT-223 top view



Schematic diagram



Pb-Free



RoHS



HAL

Halogen-Free

Maximum Ratings(Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.6	A
P_C	Collector Power Dissipation	1	W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

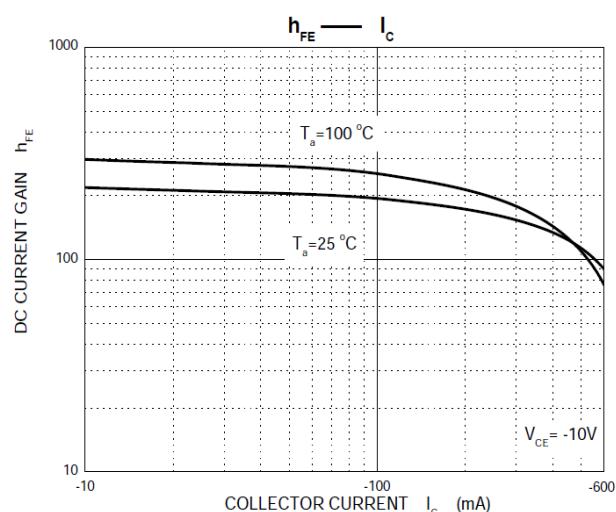
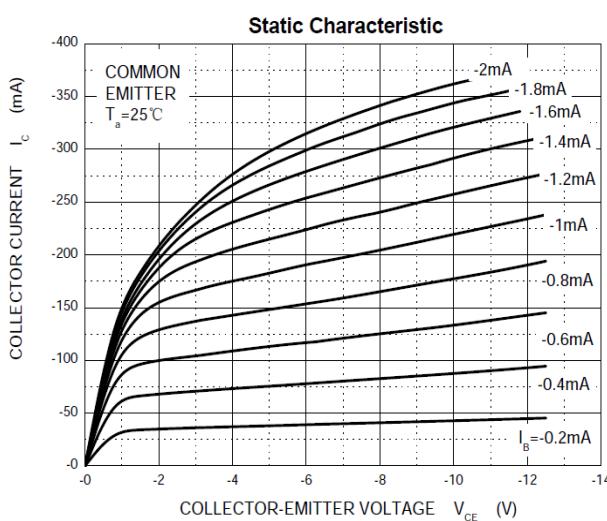
Ordering Information (Example)

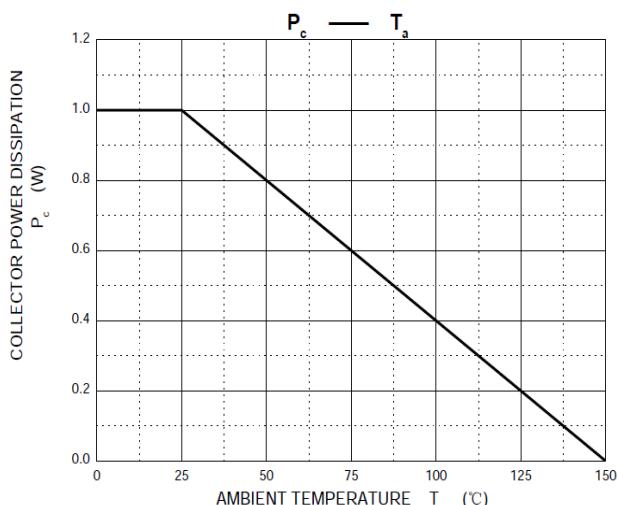
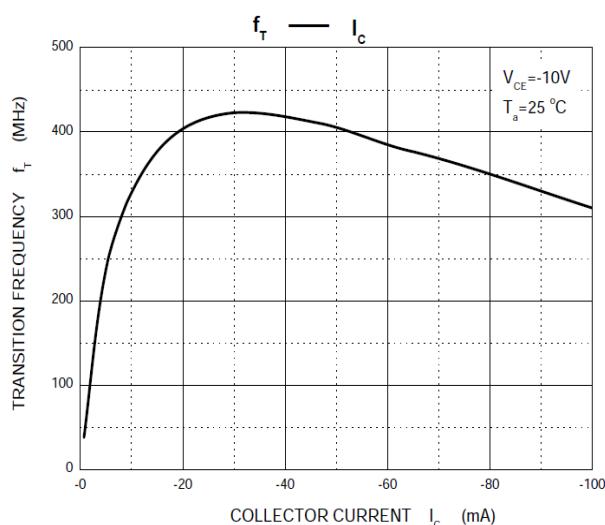
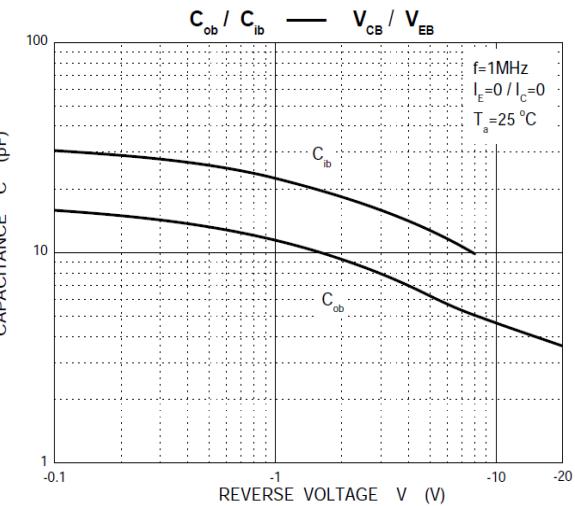
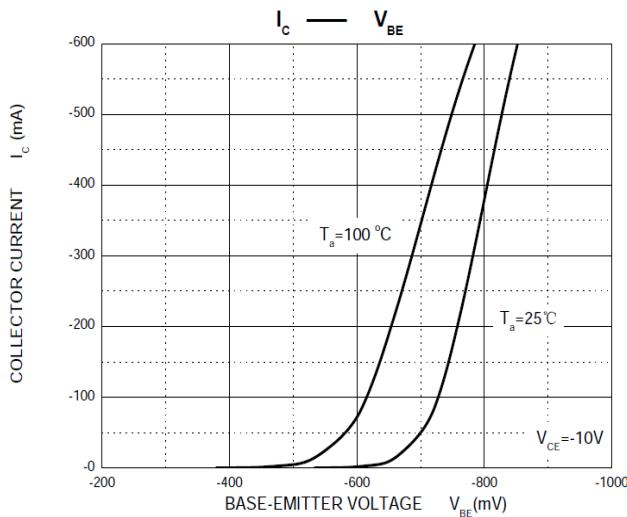
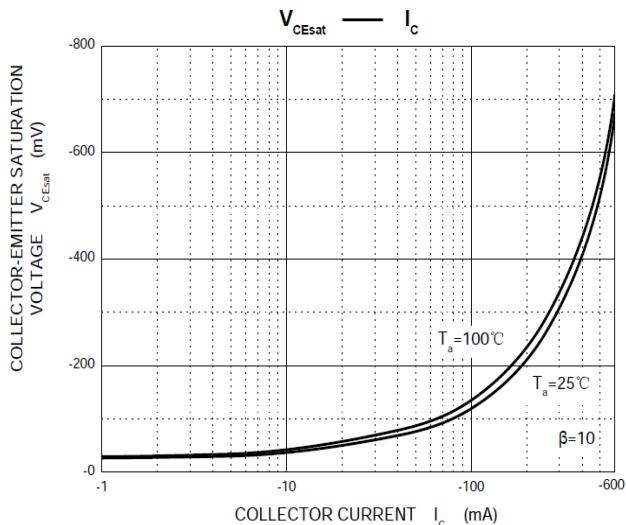
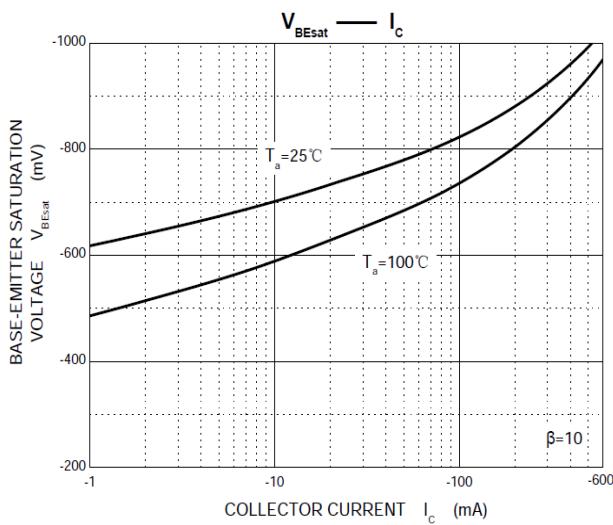
Type	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
PZT2907A	ZT2907A	2,500	5,000	35,000	13"reel

Electrical Characteristics ($T_J=25^\circ\text{C}$ unless otherwise noted)

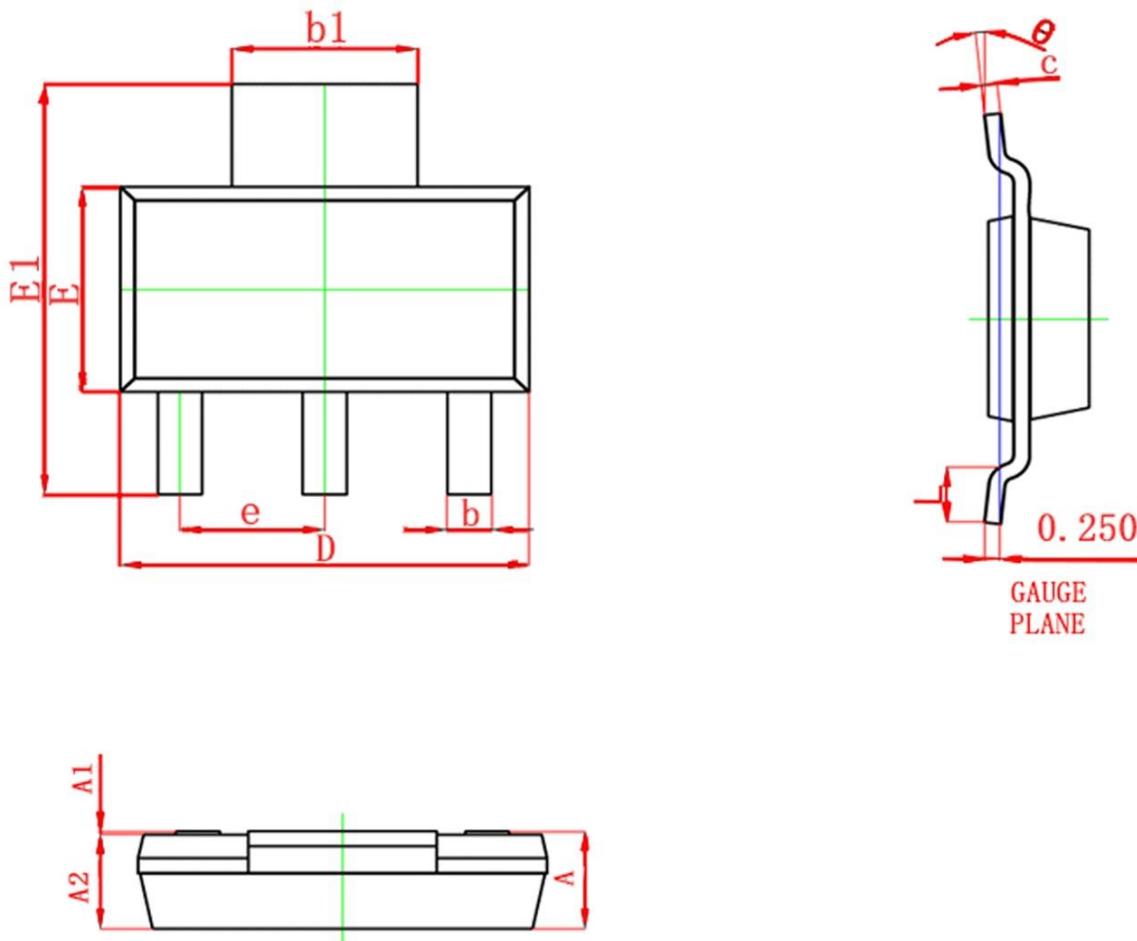
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(\text{BR})\text{CBO}}$	Collector-base breakdown voltage	$I_C=-10\mu\text{A}, I_E=0$	-60	--	--	V
$V_{(\text{BR})\text{CEO}}$	Collector-emitter breakdown voltage	$I_C=-10\text{mA}, I_B=0$	-60	--	--	V
$V_{(\text{BR})\text{EBO}}$	Emitter-base breakdown voltage	$I_E=-10\mu\text{A}, I_C=0$	-5	--	--	V
I_{CBO}	Collector cut-off current	$V_{\text{CB}}=-50\text{V}, I_E=0$	--	--	-10	nA
I_{EBO}	Emitter cut-off current	$V_{\text{EB}}=-5\text{V}, I_C=0$	--	--	-50	nA
$h_{\text{FE}1}$	DC current gain	$V_{\text{CE}}=-10\text{V}, I_C= -0.1\text{mA}$	75	--	--	--
$h_{\text{FE}2}$		$V_{\text{CE}}=-10\text{V}, I_C= -1\text{mA}$	100	--	--	
$h_{\text{FE}3}$		$V_{\text{CE}}=-10\text{V}, I_C= -10\text{mA}$	100	--	--	
$h_{\text{FE}4}$		$V_{\text{CE}}=-10\text{V}, I_C= -150\text{mA}$	100	--	300	
$h_{\text{FE}5}$		$V_{\text{CE}}=-10\text{V}, I_C= -500\text{mA}$	50	--	--	
$V_{\text{CE}(\text{sat})}$	Collector-emitter saturation voltage	$I_C=-150\text{mA}, I_B= -15\text{mA}$	--	--	-0.4	V
$V_{\text{CE}(\text{sat})}$		$I_C=-500\text{mA}, I_B= -50\text{mA}$	--	--	-1.6	V
$V_{\text{BE}(\text{sat})}$	Base-emitter saturation voltage	$I_C=-150\text{mA}, I_B= -15\text{mA}$	--	--	-1.3	V
$V_{\text{BE}(\text{sat})}$		$I_C=-500\text{mA}, I_B= -50\text{mA}$	--	--	-2.6	V
C_c	Collector capacitance	$V_{\text{CB}}=-10\text{V}, I_E=0, f=1\text{MHz}$			8	pF
C_E	Emitter capacitance	$V_{\text{EB}}=-2\text{V}, I_C=0, f=1\text{MHz}$			30	pF
t_d	Delay time	$I_C=-150\text{mA}, I_B1= -15\text{mA}, I_B2= -15\text{mA}$	--	--	12	ns
t_r	Rise time		--	--	30	
t_s	Storage time		--	--	300	
t_f	Fall time		--	--	65	
f_T	Transition frequency	$V_{\text{CE}}=-20\text{V}, I_C=50\text{mA}, f=100\text{MHz}$	200	--	--	MHz

Typical Characteristics





SOT-223 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	--	1.800	--	0.071
A1	0.020	0.100	0.001	0.004
A2	1.500	1.700	0.059	0.067
b	0.660	0.840	0.026	0.033
b1	2.900	3.100	0.114	0.122
c	0.230	0.350	0.009	0.014
D	6.300	6.700	0.248	0.264
E	3.300	3.700	0.130	0.146
E1	6.700	7.300	0.264	0.287
e	2.300(BSC)		0.091(BSC)	
L	0.750	--	0.030	--
θ	0°	10°	0°	10°