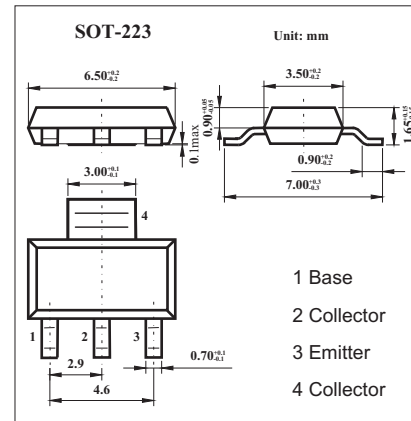


# PZT3904

## ■ Features

- Collector Power Dissipation:  $P_c=1W$
- Collector Current:  $I_c= 200mA$
- Complementary PNP Type Available(PZT3906)



## ■ Absolute Maximum Ratings $T_a = 25^{\circ}C$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	60	V
Collector - Emitter Voltage	$V_{CE0}$	40	V
Emitter - Base Voltage	$V_{EB0}$	6	V
Collector Current - Continuous	$I_C$	200	mA
Collector Power Dissipation	$P_c$	1	W
Junction Temperature	$T_J$	150	$^{\circ}C$
Storage Temperature	$T_{stg}$	-55 to 150	$^{\circ}C$

## ■ Electrical Characteristics $T_a = 25^{\circ}C$

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Collecto- base breakdown voltage	$V_{CB0}$	$I_c= 10 \mu A, I_E=0$	60			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_c= 1 mA, I_B=0$	40			V
Emitter - base breakdown voltage	$V_{EB0}$	$I_E= 10 \mu A, I_C=0$	6			V
Collector cut-off current	$I_{cBO}$	$V_{CB}= 60 V, I_E=0$			0.1	$\mu A$
Collector cut-off current	$I_{cEO}$	$V_{CE}= 30 V, V_{BE(off)}=3V$			50	nA
Emitter cut-off current	$I_{EBO}$	$V_{EB}= 5V, I_c=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}= 1V, I_c= 10mA$	100		300	
		$V_{CE}= 1V, I_c= 50mA$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c=50 mA, I_B= 5mA$			0.4	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c= 50 mA, I_B= 5mA$			0.95	V
Delay time	$t_d$	$V_{CC}=3.0V, V_{BE}=-0.5V$ $I_c=10mA, I_{B1}=-I_{B2}=1.0mA$			35	ns
Rise time	$t_r$				35	
Storage time	$t_s$	$V_{CC}=3.0V, I_c=10mA$			200	ns
Fall time	$t_f$	$I_{B1}=-I_{B2}=1.0mA$			50	
Transition frequency	$f_T$	$V_{CE}= 20V, I_c= 10mA, f=100MHz$	300			MHz

## ■ Marking

Marking	3904
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