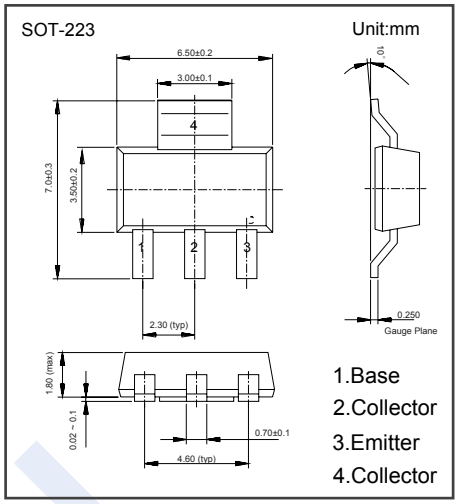
PNP Transistors

FZT591 (KZT591)



■ Features

- Collector Current Capability I_C=-1A
- Collector Emitter Voltage V_{CEO}=-60V
- Complementary to FZT491

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-80	V
Collector - Emitter Voltage	V_{CEO}	-60	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-1	A
Collector Current - Pulse	I_{CP}	-2	
Base Current	I_B	-200	mA
Collector Power Dissipation	P_C	2	W
Junction Temperature	T_J	150	℃
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= -100 μA, I_E=0	-80			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -10 mA, I_B=0	-60			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 μ A, I_C=0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -60 V , I_E=0			-0.1	uA
Collector-emitter cut-off current	I_{CES}	V_{CES} =-60V,I_B=0			-0.1	
Emitter cut-off current	I_{EBO}	V_{EB}= -4V , I_C=0			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500mA, I_B=-50mA (Note.1)			-0.3	V
		I_C=-1 A, I_B=-100mA (Note.1)			-0.6	
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=-1 A, I_B=-100mA (Note.1)			-1.2	
Base-Emitter Turn-On Voltage	$V_{BE(on)}$	V_{CE}= -5V, I_C= -1A (Note.1)			-1	
DC current gain (Note.1)	$h_{FE(1)}$	V_{CE}= -5V, I_C= -1mA	100			
	$h_{FE(2)}$	V_{CE}= -5V, I_C= -500mA	100		300	
	$h_{FE(3)}$	V_{CE}= -5V, I_C= -1 A	80			
	$h_{FE(4)}$	V_{CE}= -5V, I_C= -2 A	15			
Collector output capacitance	C_{ob}	V_{CB}= -10V, f=1MHz			10	pF
Transition frequency	f_T	V_{CE}= -10V, I_C= -50mA,f=100MHz	150			MHz

Note.1: Pulse width=300us. Duty cycle ≤ 2%