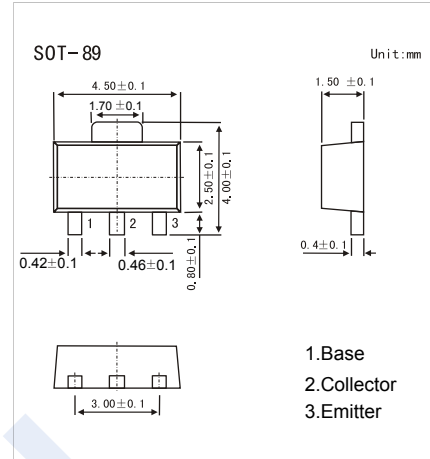


## PNP Transistors

## FCX591 (KCX591)

## ■ Features

- Collector Current Capability  $I_C = -1A$
- Collector Emitter Voltage  $V_{CE0} = -60V$

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	-80	V
Collector - Emitter Voltage	$V_{CE0}$	-60	
Emitter - Base Voltage	$V_{EB0}$	-5	
Collector Current - Continuous	$I_C$	-1	A
Collector Power Dissipation	$P_C$	0.5	W
Junction Temperature	$T_J$	150	$^\circ C$
Storage Temperature range	$T_{stg}$	-65 to 150	

■ Electrical Characteristics  $T_a = 25^\circ C$ 

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_C = -100 \mu A, I_E = 0$	-80			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C = -10 mA, I_B = 0$	-60			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = -100 \mu A, I_C = 0$	-5			
Collector-base cut-off current	$I_{CB0}$	$V_{CB} = -60 V, I_E = 0$			-100	nA
Collector- emitter cut-off current	$I_{CES}$	$V_{CE} = -60 V, I_E = 0$			-100	
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5 V, I_C = 0$			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500 mA, I_B = -50 mA$ (Note.1)			-0.3	V
		$I_C = -1 A, I_B = -100 mA$ (Note.1)			-0.6	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -1 A, I_B = -100 mA$ (Note.1)			-1.2	
Base-emitter voltage	$V_{BE}$	$V_{CE} = -5 V, I_C = -1 A$ (Note.1)			-1	
DC current gain (Note.1)	$h_{FE(1)}$	$V_{CE} = -5 V, I_C = -1 mA$	100			
	$h_{FE(2)}$	$V_{CE} = -5 V, I_C = -500 mA$	100		300	
	$h_{FE(3)}$	$V_{CE} = -5 V, I_C = -1 A$	80			
	$h_{FE(4)}$	$V_{CE} = -5 V, I_C = -2 A$	15			
Collector output capacitance	$C_{ob}$	$V_{CB} = -10 V, f = 1 MHz$			10	pF
Transition frequency	$f_T$	$V_{CE} = -10 V, I_C = -50 mA, f = 100 MHz$	150			MHz

Note.1: Pulse width=300s. Duty cycle  $\leq 2\%$

## ■ Marking

Marking	P1
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