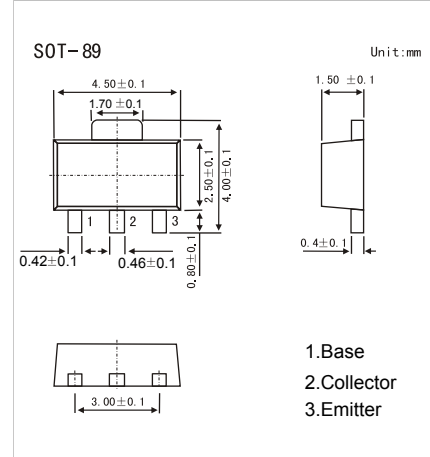


PNP Transistors

FCX591

■ 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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