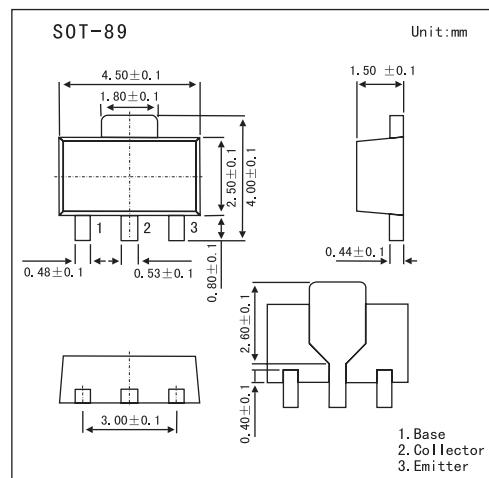


PNP Silicon Power Switching Transistor

FCX790A

■ Features

- 2W power dissipation.
- 6A peak pulse current.
- Excellent HFE characteristics.
- Low saturation voltage.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CBO}	-50	V
Collector-emitter voltage	V _{C EO}	-40	V
Emitter-base voltage	V _{EBO}	-5	V
Continuous collector current	I _{CM}	-6	A
Peak pulse current	I _C	-2	A
Power dissipation	P _{tot}	1	W
Operating and storage temperature range	T _{j,Tsg}	-55 to +150	°C

FCX790A■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}$	-50			V
Collector-emitter breakdown voltage *	$V_{(BR)CEO}$	$I_C=-10\text{mA}$	-40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}$	-5			V
Collector-base cut-off current	I_{CBO}	$V_{CB}=-10\text{V}$			0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-4\text{V}$			0.1	μA
Collector-emitter saturation voltage *	$V_{CE(\text{sat})}$	$I_C=-0.5\text{A}, I_B=-5\text{mA}$ $I_C=-1\text{A}, I_B=-10\text{mA}$ $I_C=-2\text{A}, I_B=-50\text{mA}$			-250 -350 -450	mV
Base-emitter saturation voltage *	$V_{BE(\text{sat})}$	$I_C=-1\text{A}, I_B=-10\text{mA}$			-0.9	V
Base-emitter ON voltage *	$V_{BE(\text{on})}$	$I_C=-1\text{A}, V_{CE}=-2\text{V}$		-0.8		V
Static Forward Current Transfer Ratio *	h_{FE}	$I_C=-10\text{mA}, V_{CE}=-2\text{V}$ $I_C=-500\text{mA}, V_{CE}=-2\text{V}$ $I_C=-1\text{A}, V_{CE}=-2\text{V}$ $I_C=-2\text{A}, V_{CE}=-2\text{V}$	300 250 200 150	800		
Transitional frequency	f_T	$I_C=-50\text{mA}, V_{CE}=-5\text{V}, f=50\text{MHz}$	100			MHz
Input capacitance	$C_{i\text{bo}}$	$V_{EB}=0.5\text{V}, f=1\text{MHz}$		225		pF
Output capacitance	$C_{o\text{bo}}$	$V_{CB}=-10\text{V}, f=1\text{MHz}$		24		pF
Turn-on time	$t_{(\text{on})}$	$I_C=-500\text{mA}, V_{CC}=-10\text{V}$		35		ns
Turn-off time	$t_{(\text{off})}$	$I_{B1}=I_{B2}=-50\text{mA}$		600		ns

* Pulse test: $t_p = 300 \mu\text{s}$; $d \leqslant 0.02$.

■ Marking

Marking	790
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