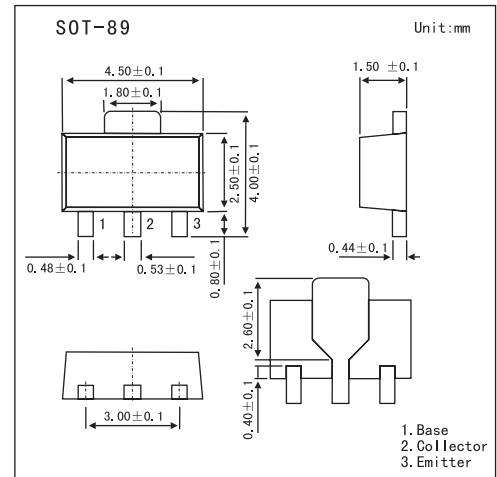


## PNP Silicon Power Switching Transistor

## FCX789A

## ■ Features

- 2W power dissipation.
- 8A peak pulse current.
- Excellent HFE characteristics up to 10 Amps.
- Extremely low saturation voltage E.g. 10mv Typ.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	-25	V
Collector-emitter voltage	$V_{CE0}$	-25	V
Emitter-base voltage	$V_{EB0}$	-5	V
Continuous collector current	$I_{CM}$	-8	A
Peak pulse current	$I_C$	-3	A
Power dissipation	$P_{tot}$	1	W
Operating and storage temperature range	$T_j, T_{stg}$	-55 to +150	$^\circ\text{C}$

## FCX789A

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC=-100μA	-25			V
Collector-emitter breakdown voltage *	V(BR)CEO	IC=-10mA	-25			V
Emitter-base breakdown voltage	V(BR)EBO	IE=-100μA	-5			V
Collector cut-off current	ICBO	VCE=-10V			0.1	μA
Emitter Cut-Off Current	IEBO	VEB=-4V			0.1	μA
Collector-emitter saturation voltage *	VCE(sat)	IC=-1A, IB=-10mA IC=-2A, IB=-20mA IC=-3A, IB=-100mA			-190 -400 -320	mV
Base-emitter saturation voltage *	VBE(sat)	IC=-1A, IB=-10mA			-0.9	V
Base-emitter ON voltage *	VBE(on)	IC=-1A, VCE=-2V		-0.8		V
Static Forward Current Transfer Ratio *	hFE	IC=-10mA, VCE=-2V IC=-1A, VCE=-2V IC=-2A, VCE=-2V IC=-6A, VCE=-2V	300 230 180 75	800		
Transitional frequency	fT	IC=-50mA, VCE=-5V, f=50MHz	100			MHz
Input capacitance	Cibo	VEB=-0.5V, f=1MHz		225		pF
Output capacitance	Cobo	VCE=-10V, f=1MHz		25		pF
Turn-on time	t(on)	IC=-500mA, VCC=-10V		35		ns
Turn-off time	t(off)	IB1=IB2=-50mA		400		ns

\* Pulse test: tp = 300 μs; d ≤ 0.02.

## ■ Marking

Marking	789
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