

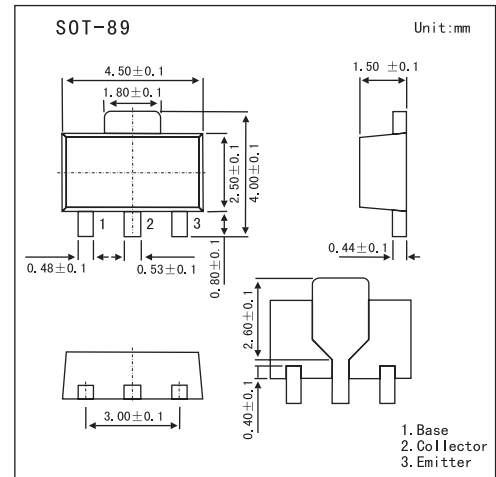
## PNP Silicon Power Switching Transistor

## FCX718

## ■ Features

- 2W power dissipation.
- 6A peak pulse current.
- Excellent HFE characteristics up to 6 Amps.
- Extremely low saturation voltage E.g. 16mv Typ.
- Extremely low equivalent on-resistance.

$R_{CE(sat)}$  96m $\Omega$  at 2.5A.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	-20	V
Collector-emitter voltage	$V_{CE0}$	-20	V
Emitter-base voltage	$V_{EB0}$	-5	V
Continuous collector current	$I_{CM}$	-6	A
Peak pulse current	$I_C$	-2.5	A
Base current	$I_B$	-500	mA
Power dissipation	$P_{tot}$	1	W
Operating and storage temperature range	$T_j, T_{stg}$	-55 to +150	$^\circ\text{C}$

## FCX718

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC=-100μA	-20	-65		V
Collector-emitter breakdown voltage *	V(BR)CEO	IC=-10mA	-20	-55		V
Emitter-base breakdown voltage	V(BR)EBO	IE=-100μA	-5	-8.8		V
Collector cut-off current	ICBO	VCE=-10V			-100	nA
Collector Emitter Cut-Off Current	ICES	VCE=-10V			-100	nA
Emitter Cut-Off Current	IEBO	VEB=-4V			-100	nA
Collector-emitter saturation voltage *	VCE(sat)	IC=-0.1A, IB=-10mA IC=-1A, IB=-20mA IC=-1.5A, IB=-50mA IC=-2.5A, IB=-200mA		-12 -110 -230	-40 -200 -220 -300	mV
Base-emitter saturation voltage *	VBE(sat)	IC=-3A, IB=-50mA		-0.98	-1.1	V
Base-emitter ON voltage *	VBE(on)	IC=-3A, VCE=-2V		-0.85	-0.95	V
Static Forward Current Transfer Ratio*	hFE	IC=-10mA, VCE=-2V IC=-0.1A, VCE=-2V IC=-2A, VCE=-2V IC=-4A, VCE=-2V IC=-6A, VCE=-2V	300 300 150 35 15	475 450 230 70 30		
Transitional frequency	fT	IC=-50mA, VCE=-10V, f=100MHz	150	180		MHz
Output capacitance	Cobo	VCE=-10V, f=1MHz		21	30	pF
Turn-on time	t(on)	IC=-0.75A, VCC=-15V		40		ns
Turn-off time	t(off)	IB1=IB2=15mA		670		ns

\* Pulse test: tp = 300 μs; d ≤ 0.02.

## ■ Marking

Marking	718
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