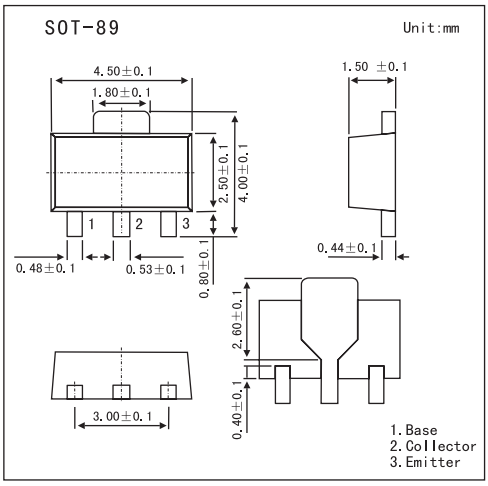
PNP Silicon Power Switching Transistor

FCX718



■ Features

- 2W power dissipation.
- 6A peak pulse current.
- Excellent H_{FE} characteristics up to 6 Amps.
- Extremely low saturation voltage E.g. 16mv Typ.
- Extremely low equivalent on-resistance.
  $R_{CE(sat)}$ 96mΩ at 2.5A.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-20	V
Collector-emitter voltage	V_{CEO}	-20	V
Emitter-base voltage	V_{EBO}	-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	℃

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA	-20	-65		V
Collector-emitter breakdown voltage *	$V_{(BR)CEO}$	I_C=-10mA	-20	-55		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA	-5	-8.8		V
Collector cut-off current	I_{CBO}	V_{CB}=-10V			-100	nA
Collector Emitter Cut-Off Current	I_{CES}	V_{CE}=-10V			-100	nA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-4V			-100	nA
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C=-0.1A, I_B=-10mA I_C=-1A, I_B=-20mA I_C=-1.5A, I_B=-50mA I_C=-2.5A, I_B=-200mA		-12 -110 -230	-40 -200 -220 -300	mV
Base-emitter saturation voltage *	$V_{BE(sat)}$	I_C=-3A, I_B=-50mA		-0.98	-1.1	V
Base-emitter ON voltage *	$V_{BE(on)}$	I_C=-3A, V_{CE}=-2V		-0.85	-0.95	V
Static Forward Current Transfer Ratio*	h_{FE}	I_C=-10mA,V_{CE}=-2V I_C=-0.1A,V_{CE}=-2V I_C=-2A,V_{CE}=-2V I_C=-4A,V_{CE}=-2V I_C=-6A,V_{CE}=-2V	300 300 150 35 15	475 450 230 70 30		
Transitional frequency	f_T	I_C=-50mA, V_{CE}=-10V, f=100MHz	150	180		MHz
Output capacitance	C_{obo}	V_{CB}=-10V, f=1MHz		21	30	pF
Turn-on time	$t_{(on)}$	I_C=-0.75A, V_{CC}=-15V		40		ns
Turn-off time	$t_{(off)}$	I_{B1}=I_{B2}=15mA		670		ns

* Pulse test: tp = 300 μs; d ⩽ 0.02.

■ Marking

Marking	718