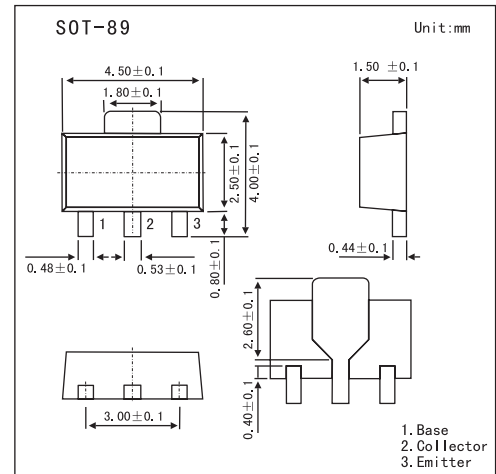


FCX718

■ 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)} 96mΩ at 2.5A.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	-20	V
Collector-emitter voltage	V _{CEO}	-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	°C

FCX718

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A$	-20	-65		V
Collector-emitter breakdown voltage *	$V_{(BR)CEO}$	$I_C = -10mA$	-20	-55		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A$	-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	$t_{(on)}$	$I_C = -0.75A, V_{CC} = -15V$ $I_{B1} = I_{B2} = 15mA$		40		ns
Turn-off time	$t_{(off)}$			670		ns

* Pulse test: $t_p = 300\mu s$; $d \leq 0.02$.

■ Marking

Marking	718
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