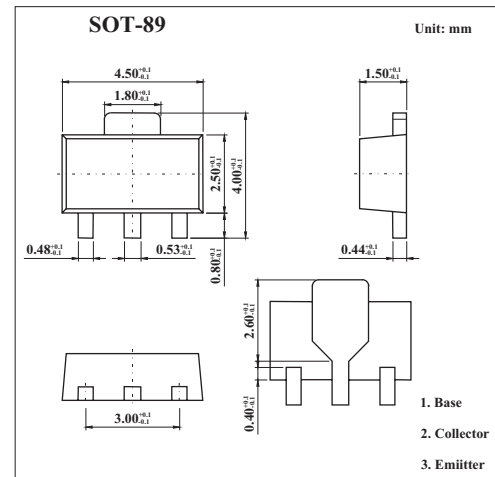


Power High Performance Transistor

FCX589

■ Features

- PNP silicon planar medium.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-50	V
Collector-emitter voltage	V_{CE0}	-30	V
Emitter-base voltage	V_{EB0}	-5	V
Peak pulse current	I_C	-1	A
Continuous collector current	I_{CM}	-2	A
Base current	I_B	-200	mA
Power dissipation	P_{tot}	1	W
Operating and storage temperature range	T_j, T_{stg}	-65 to +150	$^\circ\text{C}$

FCX589

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Breakdown Voltages	V _{(BR)CBO}	I _C =-100μA	-50			V
Breakdown Voltages *	V _{(BR)CEO}	I _C =-10mA	-30			V
Breakdown Voltages	V _{(BR)EBO}	I _E =-100μA	-5			V
Collector-base cut-off current	I _{CBO}	V _{CB} =-30V			-100	nA
Collector -Emitter Cut-Off Current	I _{CES}	V _{CE} =-30V			-100	nA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =-4V			-100	nA
Collector-emitter saturation voltage *	V _{CE(sat)}	I _C =-1A, I _B =-100mA I _C =-2A, I _B =-200mA			-0.35 -0.65	V
Base-emitter saturation voltage *	V _{BE(sat)}	I _C =-1A, I _B =-100mA			-1.2	V
Base-Emitter Turn-on Voltage *	V _{BE(on)}	I _C =-1A, V _{CE} =-2V			-1.1	V
Static Forward Current Transfer Ratio	h _{FE}	I _C =-1mA, V _{CE} =-2V*	100			
		I _C =-500mA, V _{CE} =-2V*	100		300	
		I _C =-1A, V _{CE} =-2V*	80			
		I _C =-2A, V _{CE} =-2V*	40			
Transitional frequency	f _T	I _C =-100mA, V _{CE} =-5V f=100MHz	100			MHz
Output capacitance	C _{obo}	V _{CB} =-10V, f=1MHz			15	pF

* Pulse test: t_p = 300 μs; d ≤ 0.02.

■ Marking

Marking	P89
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