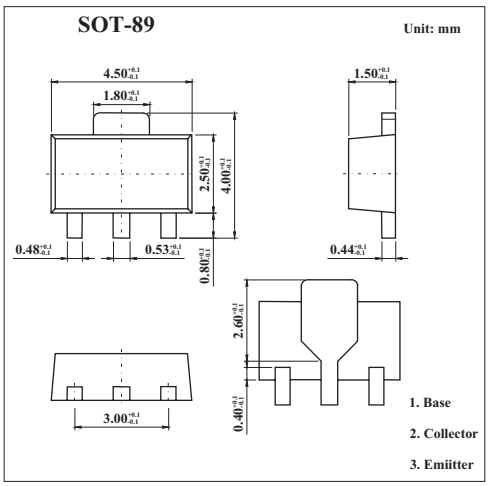
Medium Power Transistor

FCX491



■ Features

- 60 Volt V_{CEO}.
- 1 Amp continuous current.
- P_{tot}= 1 Watt.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	80	V
Collector-emitter voltage	V_{CEO}	60	V
Emitter-base voltage	V_{EBO}	5	V
Peak pulse current	I_C	1	A
Continuous collector current	I_{CM}	2	A
Power dissipation	P_{tot}	1	W
Operating and storage temperature range	T_j,T_{stg}	-65 to +150	℃

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Breakdown Voltages	$V_{(BR)CBO}$	I_C=100μA	80			V
Breakdown Voltages	$V_{CEO(sus)}$	I_C=10mA	60			V
Breakdown Voltages	$V_{(BR)EBO}$	I_E=100μA	5			V
Collector-base cut-off current	I_{CBO}	V_{CB}=60V			100	nA
	I_{CES}	V_{CE}=60V			100	nA
Emitter-base current	I_{EBO}	V_{EB}=4V			100	nA
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C=500mA, I_B=50mA I_C=1A, I_B=100mA			0.25 0.5	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	I_C=1A, I_B=100mA			1.1	V
Base-emitter ON voltage *	$V_{BE(on)}$	I_C=1A, V_{CE}=5V			1.0	V
Static Forward Current Transfer Ratio *	h_{FE}	I_C=1mA, V_{CE}=5V	100			
		I_C=500mA, V_{CE}=5V*	100		300	
		I_C=1A, V_{CE}=5V*	80			
		I_C=2A, V_{CE}=5V*	30			
Transitional frequency	f_T	I_C=50mA, V_{CE}=10V f=100MHz	150			MHz
Output capacitance	C_{obo}	V_{CB}=10V, f=1MHz			10	pF

* Pulse test: tp = 300 μs; d ⩽ 0.02.

■ Marking

Marking	N1