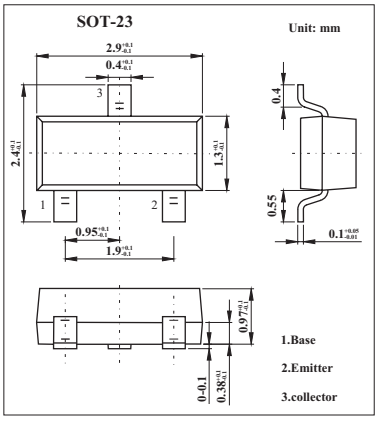
Medium Power Transistor

BCX41



Features

- SOT23 NPN silicon planar

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-emitter voltage	V_{CES}	125	V
Collector-emitter voltage	V_{CEO}	125	V
Emitter-base voltage	V_{EBO}	5	V
Continuous collector current	I_{CM}	1	A
Peak pulse current	I_C	800	mA
Base current	I_B	100	mA
Power dissipation	P_{tot}	330	mW
Operating and storage temperature range	T_j,T_{stg}	-55 to +150	℃

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-emitter cut-off current	I_{CES}	V_{CE}=100V V_{CE}=100V,Tamb = 150℃			100 10	nA μA
	I_{CEX}	V_{CE}=100V,V_{BE}=0.2V, Tamb = 85℃ V_{CE}=100V,V_{BE}=0.2V, Tamb = 125℃			10 75	μA μA
Emitter-base current	I_{EBO}	V_{EB}=4V			100	nA
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C=300mA, I_B=30mA			0.9	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	I_C=300mA, I_B=30mA			1.4	V
DC current gain *	h_{FE}	I_C=100μA,V_{CE}=1V I_C=100mA,V_{CE}=1V I_C=200mA,V_{CE}=1V	25 63 40			
Transitional frequency	f_T	I_C=10mA, V_{CE}=5V, f=20MHz		100		MHz
Output capacitance	C_{obo}	V_{CB}=10V, f=1MHz,I_E=Ie=0		12		pF

* Pulse test: tp = 300 μs; d ⩽ 0.02.

Marking

Marking	EK