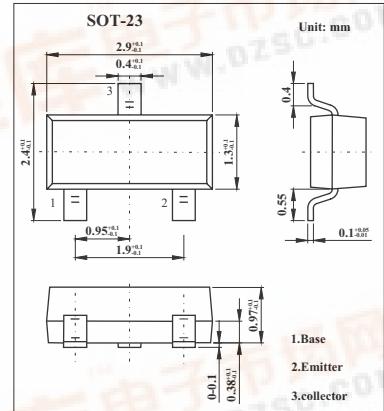


SMD Type Transistors

Medium Power Transistor  
BCX41

■ Features

- SOT23 NPN silicon planar



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-emitter voltage	V <sub>CEs</sub>	125	V
Collector-emitter voltage	V <sub>CEO</sub>	125	V
Emitter-base voltage	V <sub>EB0</sub>	5	V
Continuous collector current	I <sub>CM</sub>	1	A
Peak pulse current	I <sub>c</sub>	800	mA
Base current	I <sub>B</sub>	100	mA
Power dissipation	P <sub>tot</sub>	330	mW
Operating and storage temperature range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-emitter cut-off current	I <sub>CEs</sub>	V <sub>CE</sub> =100V			100	nA
		V <sub>CE</sub> =100V, T <sub>amb</sub> = 150°C			10	µA
	I <sub>CEX</sub>	V <sub>CE</sub> =100V, V <sub>BE</sub> =0.2V, T <sub>amb</sub> = 85°C			10	µA
		V <sub>CE</sub> =100V, V <sub>BE</sub> =0.2V, T <sub>amb</sub> = 125°C			75	µA
Emitter-base current	I <sub>EB0</sub>	V <sub>EB</sub> =4V			100	nA
Collector-emitter saturation voltage *	V <sub>CE(sat)</sub>	I <sub>c</sub> =300mA, I <sub>B</sub> =30mA			0.9	V
Base-emitter saturation voltage *	V <sub>BE(sat)</sub>	I <sub>c</sub> =300mA, I <sub>B</sub> =30mA			1.4	V
DC current gain *	h <sub>FE</sub>	I <sub>c</sub> =100µA, V <sub>CE</sub> =1V	25			
		I <sub>c</sub> =100mA, V <sub>CE</sub> =1V	63			
		I <sub>c</sub> =200mA, V <sub>CE</sub> =1V	40			
Transitional frequency	f <sub>T</sub>	I <sub>c</sub> =10mA, V <sub>CE</sub> =5V, f=20MHz		100		MHz
Output capacitance	C <sub>obo</sub>	V <sub>CB</sub> =10V, f=1MHz, I <sub>E</sub> =I <sub>e</sub> =0		12		pF

\* Pulse test: tp = 300 µs; d ≤ 0.02.

■ Marking

Marking	EK
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