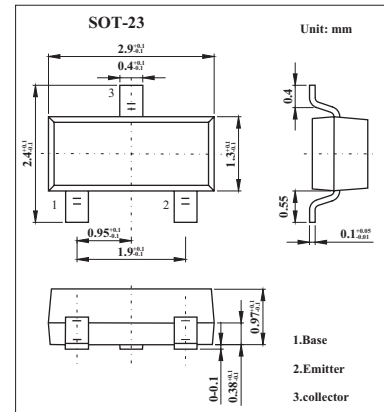


## General Purpose Transistor

## BCX71G

## ■ Features

- PNP Epitaxial Silicon Transistor

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	-45	V
Collector-emitter voltage	$V_{CE0}$	-45	V
Emitter-base voltage	$V_{EB0}$	-5	V
Collector current	$I_C$	-100	mA
Collector Power Dissipation	$P_C$	350	mW
Storage Temperature	$T_{STG}$	150	$^\circ\text{C}$

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage	$BV_{CE0}$	$I_C = -2\text{mA}, I_B = 0$	-45			V
Emitter-Base Breakdown Voltage	$BV_{EB0}$	$I_E = -1\mu\text{A}, I_C = 0$	-5			V
Collector Cut-off Current	$I_{CES}$	$V_{CE} = -32\text{V}, V_{BE} = 0$			-20	nA
DC Current Gain	$h_{FE}$	$V_{CE} = -5\text{V}, I_C = -2\text{mA}$	120		220	
		$V_{CE} = -1\text{V}, I_C = -50\mu\text{A}$	60			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -10\text{mA}, I_B = -0.25\text{mA}$			-0.25	V
		$I_C = -50\text{mA}, I_B = -1.25\text{mA}$			-0.55	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -10\text{mA}, I_B = -0.25\text{mA}$	-0.6		-0.85	V
		$I_C = -50\text{mA}, I_B = -1.25\text{mA}$	-0.68		-1.05	V
Base-Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = -5\text{V}, I_C = -2\text{mA}$	-0.6		-0.75	V
Output Capacitance	$C_{ob}$	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$				pF
Noise Figure	NF	$I_C = 0.2\text{mA}, V_{CE} = 5\text{V}, f = 1\text{kHz}, R_S = 2\text{k}\Omega$			6	dB
Turn On Time	$t_{ON}$	$I_C = -10\text{mA}, I_{B1} = -1\text{mA}$			150	ns
Turn Off Time	$t_{OFF}$	$I_{B2} = -1\text{mA}, V_{BB} = 3.6\text{V}, R_L = 990\Omega$			800	ns

## ■ Marking

Marking	BG
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