

# **Excellent Integrated System Limited**

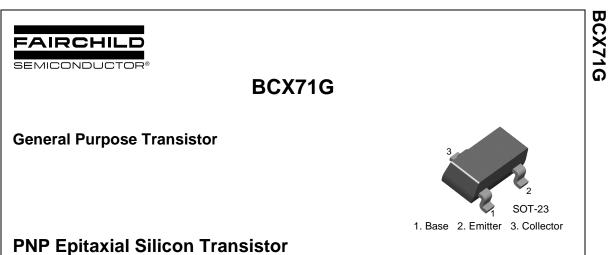
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Fairchild Semiconductor BCX71G

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Absolute Maximum Ratings Ta=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	-45	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-45	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5.0	V
I <sub>C</sub>	Collector Current	-100	mA
P <sub>C</sub>	Collector Power Dissipation	350	mW
T <sub>STG</sub>	Storage Temperature	150	°C

Refer to KST5086 for graphs

## **Electrical Characteristics** $T_a=25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -2mA, I <sub>B</sub> =0	-45		V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -1μΑ, I <sub>C</sub> =0	-5		V
I <sub>CES</sub>	Collector Cut-off Current	V <sub>CE</sub> = -32V, V <sub>BE</sub> =0		-20	nA
h <sub>FE</sub>	DC Current Gain	V <sub>CE</sub> = -5V, I <sub>C</sub> = -2mA V <sub>CE</sub> = -1V, I <sub>C</sub> = -50μA	120 60	220	
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -10mA, I <sub>B</sub> = -0.25mA I <sub>C</sub> = -50mA, I <sub>B</sub> = -1.25mA		-0.25 -0.55	V V
V <sub>BE</sub> (sat)	Base-Emitter Saturation Voltage	I <sub>C</sub> = -10mA, I <sub>B</sub> = -0.25mA I <sub>C</sub> = -50mA, I <sub>B</sub> = -1.25mA	-0.6 -0.68	-0.85 -1.05	V V
V <sub>BE</sub> (on)	Base-Emitter On Voltage	V <sub>CE</sub> = -5V, I <sub>C</sub> = -2mA	-0.6	-0.75	V
C <sub>ob</sub>	Output Capactance	V <sub>CB</sub> = -10V, I <sub>E</sub> =0, f=1MHz			pF
NF	Noise Figure	I <sub>C</sub> =0.2mA, V <sub>CE</sub> =5V f=1KHz, R <sub>S</sub> =2KΩ		6	dB
t <sub>ON</sub>	Turn On Time	I <sub>C</sub> = -10mA, I <sub>B1</sub> = -1mA		150	ns
t <sub>OFF</sub>	Turn Off Time	I <sub>B2</sub> = -1mA, V <sub>BB</sub> =3.6V R <sub>L</sub> =990Ω		800	ns

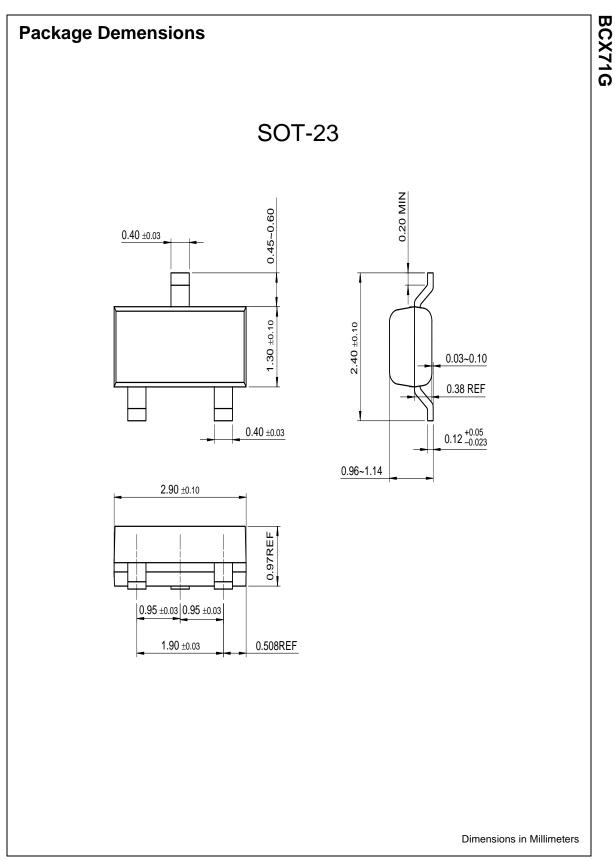




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