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Please note: As part of the Fairchild Semiconductor integration, some of the Fairchild orderable part numbers will need to change in order to meet ON Semiconductor's system requirements. Since the ON Semiconductor product management systems do not have the ability to manage part nomenclature that utilizes an underscore (_), the underscore (_) in the Fairchild part numbers will be changed to a dash (-). This document may contain device numbers with an underscore (_). Please check the ON Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.onsemi.com. Please email any questions regarding the system integration to Fairchild_questions@onsemi.com.

FAIRCHILD
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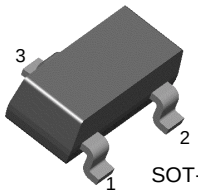
BCX71G

General Purpose Transistor



SOT-23

1. Base 2. Emitter 3. Collector

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

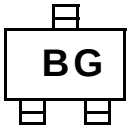
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-45	V
V_{CEO}	Collector-Emitter Voltage	-45	V
V_{EBO}	Emitter-Base Voltage	-5.0	V
I_C	Collector Current	-100	mA
P_C	Collector Power Dissipation	350	mW
T_{STG}	Storage Temperature	150	°C

• Refer to KST5086 for graphs

Electrical Characteristics T_a=25°C unless otherwise noted

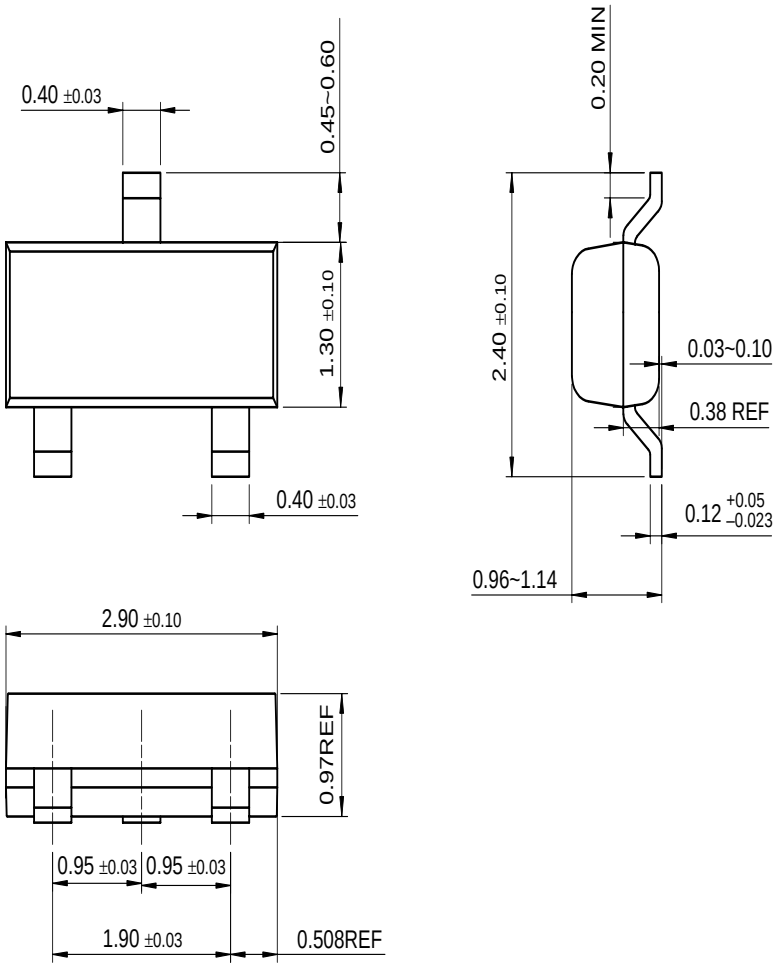
Symbol	Parameter	Test Condition	Min.	Max.	Units
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C= -2mA, I_B=0	-45		V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E= -1μA, I_C=0	-5		V
I_{CES}	Collector Cut-off Current	V_{CE}= -32V, V_{BE}=0		-20	nA
h_{FE}	DC Current Gain	V_{CE}= -5V, I_C= -2mA V_{CE}= -1V, I_C= -50μA	120 60	220	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C= -10mA, I_B= -0.25mA I_C= -50mA, I_B= -1.25mA		-0.25 -0.55	V V
V_{BE} (sat)	Base-Emitter Saturation Voltage	I_C= -10mA, I_B= -0.25mA I_C= -50mA, I_B= -1.25mA	-0.6 -0.68	-0.85 -1.05	V V
V_{BE} (on)	Base-Emitter On Voltage	V_{CE}= -5V, I_C= -2mA	-0.6	-0.75	V
C_{ob}	Output Capactance	V_{CB}= -10V, I_E=0, f=1MHz			pF
NF	Noise Figure	I_C=0.2mA, V_{CE}=5V f=1KHz, R_S=2KΩ		6	dB
t_{ON}	Turn On Time	I_C= -10mA, I_{B1}= -1mA		150	ns
t_{OFF}	Turn Off Time	I_{B2}= -1mA, V_{BB}=3.6V R_L=990Ω		800	ns

Marking



Package Demensions

SOT-23



Dimensions in Millimeters

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