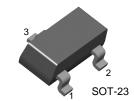


## BCX71G

## **General Purpose Transistor**



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 <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<sub>a</sub>=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	$I_C$ = -2mA, $I_B$ =0	-45		V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	$I_{E}$ = -1 $\mu$ A, $I_{C}$ =0	-5		V
I <sub>CES</sub>	Collector Cut-off Current	$V_{CE}$ = -32V, $V_{BE}$ =0		-20	nA
h <sub>FE</sub>	DC Current Gain	$V_{CE}$ = -5V, $I_{C}$ = -2mA $V_{CE}$ = -1V, $I_{C}$ = -50 $\mu$ A	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	$I_C$ = -10mA, $I_B$ = -0.25mA $I_C$ = -50mA, $I_B$ = -1.25mA	-0.6 -0.68	-0.85 -1.05	V V
V <sub>BE</sub> (on)	Base-Emitter On Voltage	$V_{CE}$ = -5V, $I_{C}$ = -2mA	-0.6	-0.75	V
C <sub>ob</sub>	Output Capactance	$V_{CB}$ = -10V, $I_{E}$ =0, f=1MHz			pF
NF	Noise Figure	$I_C$ =0.2mA, $V_{CE}$ =5V f=1KHz, $R_S$ =2K $\Omega$		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	$I_{B2}$ = -1mA, $V_{BB}$ =3.6V $R_L$ =990 $\Omega$		800	ns

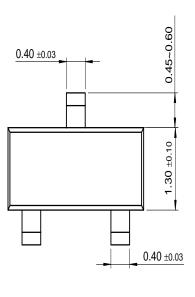


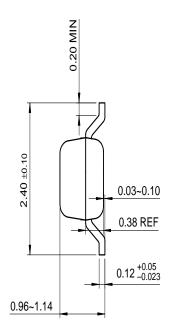


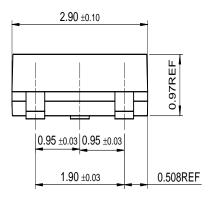
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# **Package Demensions**

# **SOT-23**







Dimensions in Millimeters

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