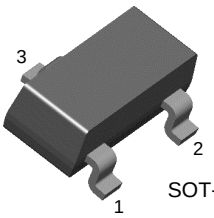
FAIRCHILD
SEMICONDUCTOR®

BCW61A/B/C/D

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	-32	V
V_{CEO}	Collector-Emitter Voltage	-32	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	-55 ~ 150	°C

• Refer to KST5086 for graphs

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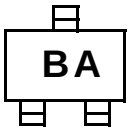
Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C= -2mA, I_B=0	-32		
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E= -1μA, I_C=0	-5		
I_{CES}	Collector Cut-off Current	V_{CB}= -32V, V_{BE}=0		-20	
h_{FE}	DC Current Gain				
	: BCW61B	V_{CE}= -5V, I_C= -10μA	20		V
	: BCW61C		40		
	: BCW61D		100		
	: BCW61A	V_{CE}= -5V, I_C= -2mA	120	220	V
	: BCW61B		140	310	
	: BCW61C		250	460	
	: BCW61D		380	630	
	: BCW61A	V_{CE}= -5V, I_C= -50mA	60		nA
	: BCW61B		80		
	: BCW61C		100		
	: BCW61D		100		
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C= -50mA, I_B= -1.25mA		-0.55	V
		I_C= -10mA, I_B= -0.25mA		-0.25	V
V_{BE} (sat)	Base-Emitter Saturation Voltage	I_C= -50mA, I_B= -1.25mA	0.68	1.05	V
		I_C= -10mA, I_B= -0.25mA	0.6	0.85	V
V_{BE} (on)	Base-Emitter On Voltage	V_{CE}= -5V, I_C= -2mA	0.6	0.75	V
C_{ob}	Output Capacitance	V_{CB}= -10V, I_E=0 f=1MHz		6	pF
NF	Noise Figure	I_C= -0.2mA, V_{CE}= -5V R_G=20KΩ, f=1KHz		6	dB
t_{ON}	Turn On Time	I_C= -10mA, I_{B1}= -1mA		150	ns
t_{OFF}	Turn Off Time	V_{BB}= -3.6V, B22= -1mA R1=R2=5.0KΩ, R_L=990Ω		800	ns

Marking Code

Type	BCW61A	BCW61B	BCW61C	BCW61D
Mark.	BA	BB	BC	BD

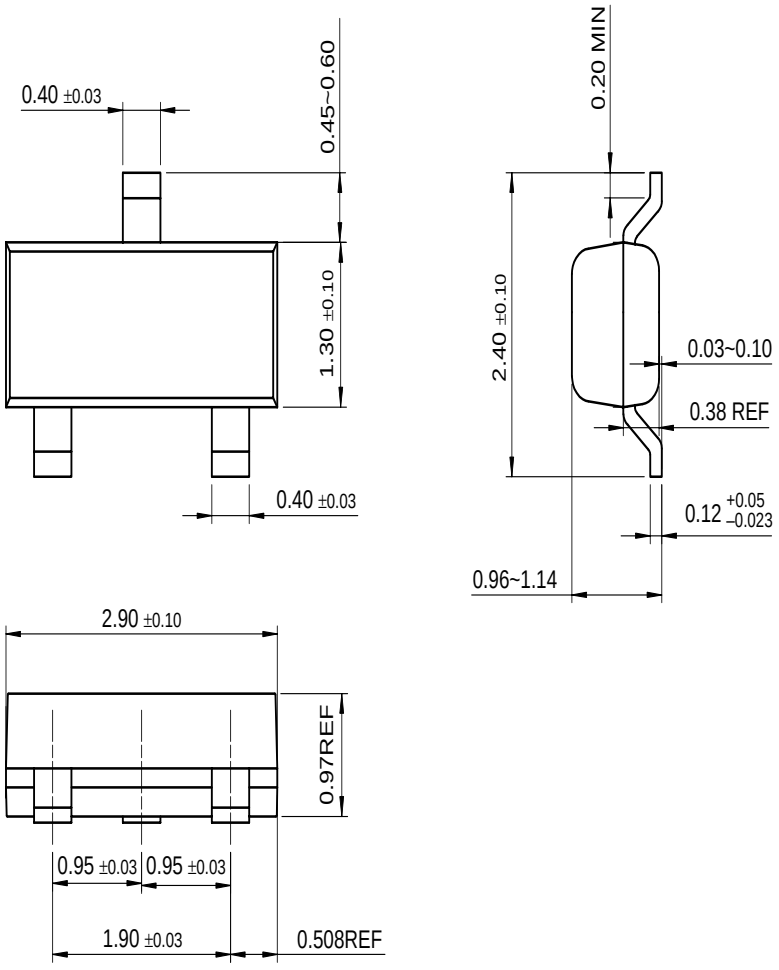
Marking



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Package Demensions

SOT-23



Dimensions in Millimeters

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