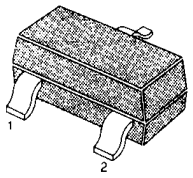
BCW61A/B/C/D PNP EPITAXIAL SILICON TRANSISTOR

GENERAL PURPOSE TRANSISTOR

SOT-23



1. Base 2. Emitter 3. Collector

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

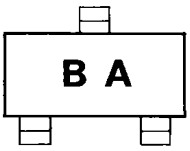
Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-32	V
Collector-Emitter Voltage	V_{CEO}	-32	V
Emitter-Base Voltage	V_{EBO}	-5.0	V
Collector Current	I_C	-100	mA
Collector Dissipation	P_C	350	mW
Storage Temperature	T_{STG}	-55 ~ 150	°C

• Refer to KS5086 for graphs

ELECTRICAL CHARACTERISTICS (T_A=25°C)

Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C= -2mA, I_B=0	-32		V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E= -1μA, I_C=0	-5		V
Collector Cut-off Current	I_{CES}	V_{CB}= -32V, V_{BE}=0		-20	nA
DC Current Gain	h_{FE}				
: BCW61B		V_{CE}= -5V, I_C= -10μA	20		
: BCW61C			40		
: BCW61D			100		
: BCW61A		V_{CE}= -5V, I_C= -2mA	120	220	
: BCW61B			140	310	
: BCW61C			250	460	
: BCW61D			380	630	
: BCW61A		V_{CE}= -5V, I_C= -50mA	60		
: BCW61B			80		
: BCW61C			100		
: BCW61D			100		
Collector-Emitter Saturation Voltage	V_{CE} (sat)	I_C= -50mA, I_B= -1.25mA		-0.55	V
		I_C= -10mA, I_B= -0.25mA		-0.25	V
Base-Emitter Saturation Voltage	V_{BE} (sat)	I_C= -50mA, I_B= -1.25mA	0.68	1.05	V
		I_C= -10mA, I_B= -0.25mA	0.6	0.85	V
Base-Emitter On Voltage	V_{BE} (on)	V_{CE}= -5V, I_C= -2mA	0.6	0.75	V
Output Capacitance	C_{OB}	V_{CB}= -10V, I_E=0 f=1MHz		6	pF
Noise Figure	NF	I_C= -0.2mA, V_{CE}= -5V R_G=20KΩ, f=1KHz		6	dB
Turn On Time	t_{ON}	I_C= -10mA, I_B1= -1mA		150	ns
Turn Off Time	t_{OFF}	V_{BB}= -3.6V, I_B2= -1mA R1=R2=50KΩ, R_L=990Ω		800	ns

Marking



Rev. B

FAIRCHILD SEMICONDUCTOR TM

MARKING CODE

TYPE	BCW61A	BCW61B	BCW61C	BCW61D
MARK.	BA	BB	BC	BD

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