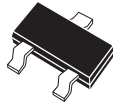


BCW61B
BCW61C
BCW61D

SURFACE MOUNT
PNP SILICON TRANSISTOR



SOT-23 CASE

CentralTM

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR BCW61B Series types are PNP Silicon Transistors manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for low level, low noise applications.

MARKING CODES: BCW61B : BB
BCW61C : BC
BCW61D : BD

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL		UNITS
Collector-Emitter Voltage	V _{CEO}	32	V
Collector-Base Voltage	V _{CBO}	32	V
Emitter-Base Voltage	V _{EBO}	5.0	V
Collector Current	I _C	100	mA
Power Dissipation	P _D	350	mW
Operating and Storage			
Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	Θ _{JA}	357	°C/W

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

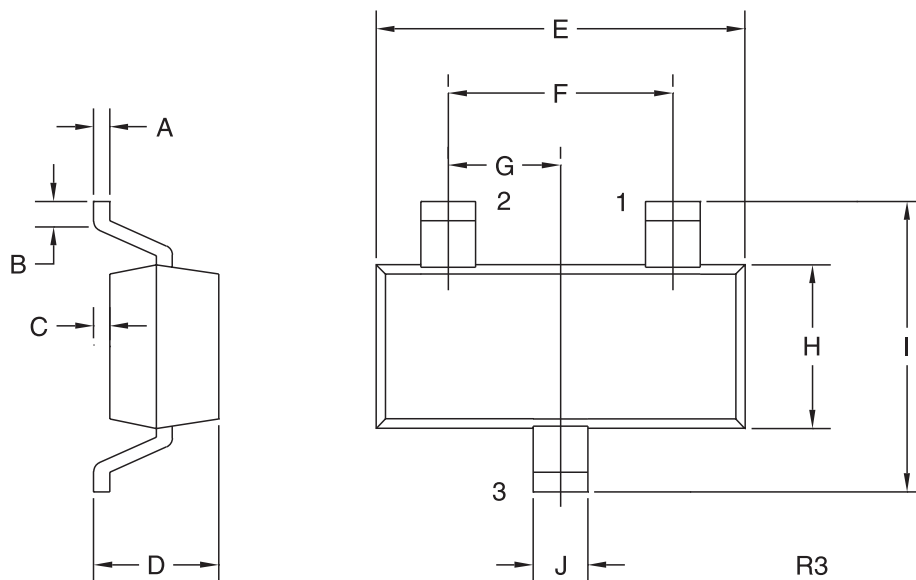
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CES}	V _{CE} =32V		20	nA
I _{CES}	V _{CE} =32V, T _A =150°C		20	μA
BV _{CEO}	I _C =2.0mA	32		V
BV _{EBO}	I _E =1.0μA	5.0		V
V _{CE} (SAT)	I _C =10mA, I _B =250μA		0.25	V
V _{CE} (SAT)	I _C =50mA, I _B =1.25mA		0.55	V
V _{BE} (SAT)	I _C =10mA, I _B =250μA	0.60	0.85	V
V _{BE} (SAT)	I _C =50mA, I _B =1.25mA	0.68	1.05	V
V _{BE} (ON)	V _{CE} =5.0V, I _C =2.0mA	0.60	0.75	V
C _{ob}	V _{CB} =10V, I _C =0, f=1.0MHz		6.0	pF
NF	V _{CE} =5.0V, I _C =0.2mA, R _S =2.0kΩ, f=1.0kHz, BW=200Hz	6.0		dB
t _{on}	V _{CC} =10V, I _C =10mA, R _L =990Ω, I _{B1} =I _{B2} =1.0mA		150	ns
t _{on}	V _{CC} =10V, I _C =10mA, R _L =990Ω, I _{B1} =I _{B2} =1.0mA		800	ns

		BCW61B		BCW61C		BCW61D	
		MIN	MAX	MIN	MAX	MIN	MAX
h _{FE}	V _{CE} =5.0V, I _C =10μA	30		40		100	
h _{FE}	V _{CE} =5.0V, I _C =2.0mA	140	310	250	460	380	630
h _{FE}	V _{CE} =1.0V, I _C =50mA	80		100		100	
h _{fe}	V _{CE} =5.0V, I _C =2.0mA, f=1.0kHz	175	350	250	500	350	700

R1 (20-February 2003)

**SURFACE MOUNT
PNP SILICON TRANSISTOR**

SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) BASE
- 2) EMITTER
- 3) COLLECTOR

MARKING CODES: BCW61B : BB
BCW61C : BC
BCW61D : BD

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

R1 (20-February 2003)