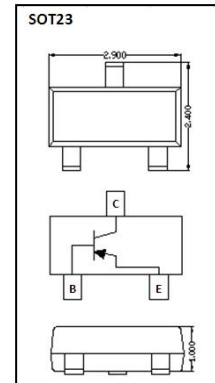


DATA SHEET

BCW68H

- ◇ Capable of 330mWatts of Power Dissipation
- ◇ Operating and Storage Junction Temperatures: -55°C to 150°C
- ◇ Surface Mount SOT-23 Package
- ◇ RoHS compliant / Green EMC
- ◇ Collector current: $I_C=0.8\text{A}$

Device Marking Code	
BCW68H	DH



MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-45	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-0.8	A
P_C	Collector Power Dissipation @Ts=79°C	330	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	285	$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS @ 25° C Unless Otherwise Specified

Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
V_{CEO}	Collector-emitter breakdown voltage	$I_C=-10\text{mA}, I_B=0$	-45			V
V_{CBO}	Collector-base breakdown voltage	$I_C=-10\mu\text{A}, I_E=0$	-60			V
V_{EBO}	Emitter-base breakdown voltage	$I_E=-100\mu\text{A}, I_C=0$	-5.0			V
I_{CBO}	Collector cutoff current	$V_{CB}=-45\text{V}, I_E=0\text{V}$			-100	nA
I_{EBO}	Emitter cut-off current	$V_{EB}=-4\text{V}, I_C=0$			-100	nA

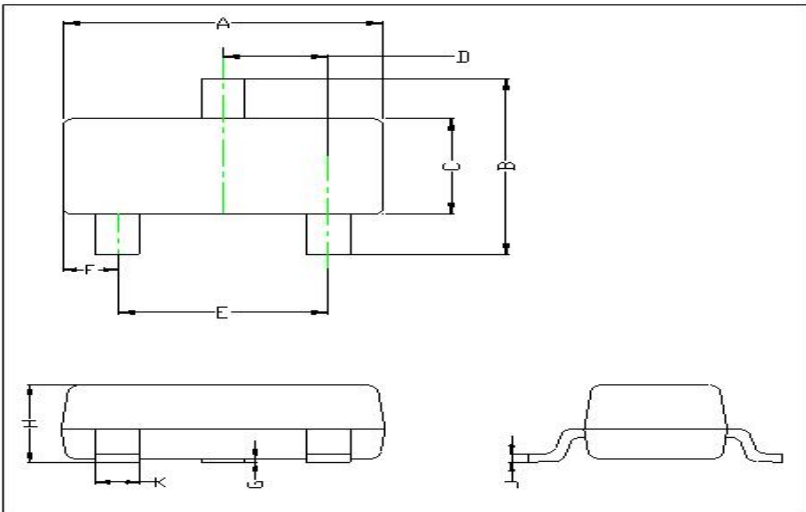
h_{FE}	DC current gain	$I_C=-10mA, V_{CE}=-1V$	180	630	
		$I_C=-100mA, V_{CE}=-2V$	250		
		$I_C=-500mA, V_{CE}=-2V$	100		
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=-100mA, I_B=-10mA$ $I_C=-500mA, I_B=-50mA$		-0.3 -1.0	V
$V_{BE(sat)}$	Base-emitter saturation Voltage	$I_C=-100mA, I_B=-10mA$ $I_C=-500mA, I_B=-50mA$		-1.25 -2.0	V
f_T	Transition frequency	$I_C=-20mA,$ $V_{CE}=-10V, f=100MHz$		100	MHZ
C_{CB}	Collector Output Capacitance	$V_{CB}=-10V, I_E=0V, f=1MHz$		6	pF
C_{EB}	Emitter-Base Capacitance	$V_{EB}=0.5V, f=1MHz$		60	

ORDERING INFORMATION

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
BCW68H	SOT23	Tape & Reel 3000pcs /7" Reel	8mm	4mm	Conductive	

PACKAGE DIMENSIONS

Package Outline : SOT23



The diagram shows three views of the SOT23 package: a top view with dimensions A, B, C, D, E, F, and G; a side view with dimensions H and K; and a perspective view of the package with its leads. Dimension A is the total width, B is the width of the main body, C is the width of the lead frame, D is the width of the top lead, E is the width of the bottom lead, F is the width of the lead frame, G is the lead thickness, H is the height of the package, and K is the lead length.

Symbol	Dimensions in mm	
	Min.	Max.
A	2.800	3.040
B	2.100	2.640
C	1.200	1.400
D	0.890	1.030
E	1.780	2.050
F	0.450	0.600
G	0.013	0.100
H	0.900	1.110
J	0.090	0.180
K	0.370	0.510

SOT23 Package Outline

Note:
 1. Halogen free ,EMC
 2. Pb free solder
 3. Lead thickness solder plating
 4. Lead frame CAC-5
 5. Other Tolerance ± 0.05
 6. Dimensions are exclusive of Burrs Mold Flash and Tie Bar extrusions
 7. Unit : mm