

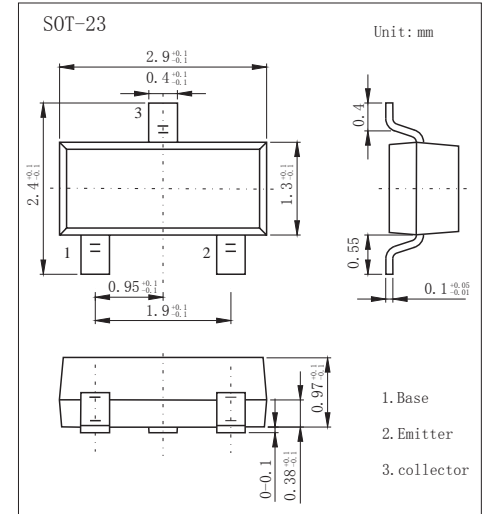
## SOT-23 Plastic-Encapsulate Transistors

### Features

- Complementary to BCW66, BCW68 is subdivided into three groups F, G and H according to its DC current gain.
- PNP Transistors

### MECHANICAL DATA

- Case style: SOT-23 molded plastic
- Mounting position: any



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	-60	V
Collector - Emitter Voltage	$V_{CE0}$	-45	
Emitter - Base Voltage	$V_{EB0}$	-5	
Collector Current - Continuous	$I_C$	-800	mA
Collector Power Dissipation	$P_C$	330	mW
Junction Temperature	$T_J$	150	°C
Storage Temperature range	$T_{stg}$	-55 to 150	

### PACKAGE INFORMATION

Device	Package	Shipping
BCW68	SOT-23	3000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_C = -100 \mu A, I_E = 0$	-60			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C = -10 mA, I_B = 0$	-45			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = -100 \mu A, I_C = 0$	-5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = -45 V, I_E = 0$			-20	nA
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4 V, I_C = 0$			-20	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100 mA, I_B = -10 mA$			-0.3	V
		$I_C = -500 mA, I_B = -50 mA$			-0.7	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100 mA, I_B = -10 mA$			-1.25	
		$I_C = -500 mA, I_B = -50 mA$			-2	
DC current gain	$h_{FE(1)}$	$V_{CE} = -10 V, I_C = -0.1 mA$	F	35		
			G	50		
			H	80		
	$h_{FE(2)}$	$V_{CE} = -1 V, I_C = -10 mA$	F	75		
			G	120		
			H	180		
	$h_{FE(3)}$	$V_{CE} = -1 V, I_C = -100 mA$	F	100	250	
			G	160	400	
			H	250	630	
	$h_{FE(4)}$	$V_{CE} = -2 V, I_C = -500 mA$	F	35		
			G	60		
			H	100		
Collector output capacitance	$C_{ob}$	$V_{CB} = -10 V, I_E = 0, f = 1 MHz$		6		pF
Collector input capacitance	$C_{ib}$	$V_{EB} = -0.5 V, I_E = 0, f = 1 MHz$		60		
Transition frequency	$f_T$	$V_{CE} = -5 V, I_C = -50 mA, f = 20 MHz$		200		MHz

### Classification of $h_{FE(3)}$

Type	BCW68F	BCW68G	BCW68H
Range	100-250	160-400	250-630
Marking	DF	DG	DH

# RATINGS AND CHARACTERISTIC CURVES

## Typical Characteristics

