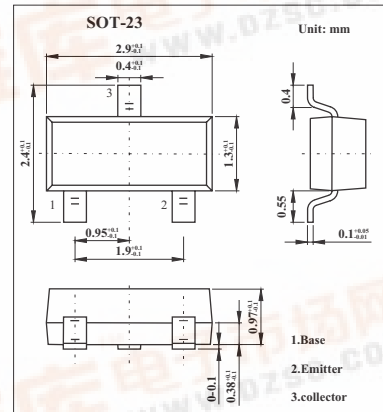


SMD Type Transistors

PNP General Purpose Transistors  
BCW67,BCW68

■ Features

- For general AF applications.
- High current gain.
- Low collector-emitter saturation voltage.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	BCW67	BCW68	Unit
Collector-base voltage	V <sub>CB0</sub>	-45	-60	V
Collector-emitter voltage	V <sub>CE0</sub>	-32	-45	V
Emitter-base voltage	V <sub>EB0</sub>	-5	-5	V
Collector current	I <sub>C</sub>	-800		mA
Peak collector current	I <sub>CM</sub>	-1000		mA
Base current	I <sub>B</sub>	-100		mA
Peak base current	I <sub>BM</sub>	-200		mA
Total power dissipation, Ts = 79°C	P <sub>tot</sub>	330		mW
Junction temperature	T <sub>j</sub>	150		°C
Storage temperature	T <sub>stg</sub>	-65 to +150		°C
Junction - soldering point	R <sub>thJS</sub>	≤215		K/W

## BCW67,BCW68

## ■ Electrical Characteristics Ta = 25°C

Parameter		Symbol	Testconditons	Min	Typ	Max	Unit
Collector-emitter breakdown voltage	BCW67	V(BR)CEO	Ic = -10 mA, Ib = 0	-32			V
	BCW68			-45			
Collector-base breakdown voltage	BCW67	V(BR)CBO	Ic = -10 μA, IE = 0	-45			V
	BCW68			-60			
Emitter-base breakdown voltage		V(BR)EBO	IE = -10μA, Ic = 0	-5			V
Collector cutoff current	BCW67	ICBO	V <sub>CB</sub> = -32 V, IE = 0			-20	nA
	BCW68		V <sub>CB</sub> = -45 V, IE = 0			-20	
	BCW67	ICBO	V <sub>CB</sub> = -32 V, IE = 0, TA = 150 °C			-20	μA
	BCW68		V <sub>CB</sub> = -45 V, IE = 0, TA = 150 °C			-20	
Emitter cutoff current		IEBO	VEB = -4 V, Ic = 0			-20	nA
DC current gain *	hFE-group	A/F	Ic = 100 μA, VCE = 10 V	35			
		B/G		50			
		C/H		80			
DC current gain *	hFE-group	A/F	Ic = 10 mA, VCE = 1 V	75			
		B/G		120			
		C/H		180			
DC current gain *	hFE-group	A/F	Ic = -100 mA, VCE = -1 V	100	160	250	
		B/G		160	250	400	
		C/H		250	350	630	
Collector-emitter saturation voltage *		VCE(sat)	Ic = -100 mA, Ib = -10 mA			-0.3	V
			Ic = -500 mA, Ib = -50 mA			-0.7	
Base-emitter saturation voltage *		VBE(sat)	Ic = -100 mA, Ib = -10 mA			-1.25	
			Ic = -500 mA, Ib = -50 mA			-2	
Transition frequency		f <sub>T</sub>	Ic = -50 mA, VCE = -5 V, f = 20 MHz		200		MHz
Collector-base capacitance		C <sub>cb</sub>	V <sub>CB</sub> = -10 V, f = 1 MHz		6		pF
Emitter-base capacitance		C <sub>eb</sub>	VEB = -0.5 V, f = 1 MHz		60		

\* Pulse test: t ≤ 300μs, D = 2%.

## ■ hFE Classification

TYPE	BCW67		
Rank	A	B	C
Marking	DAs	DBs	DCs

TYPE	BCW68		
Rank	F	G	H
Marking	DFs	DGs	DHs