

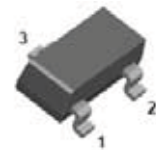
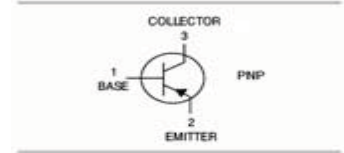
PNP General Purpose Amplifier: BCW67/BCW68

Features:

- For general AF applications
- High current gain
- Low collector-emitter saturation voltage
- Complementary types: BCW65, BCW66 (NPN)

Applications:

- This device is designed for general purpose amplifier and switching applications



SOT-23

Ordering Information

Type No.	Marking:	Package Code:
BCW67A/B/C	DA/DB/DC	SOT-23
BCW68F/G/H	DF/DG/DH	SOT-23

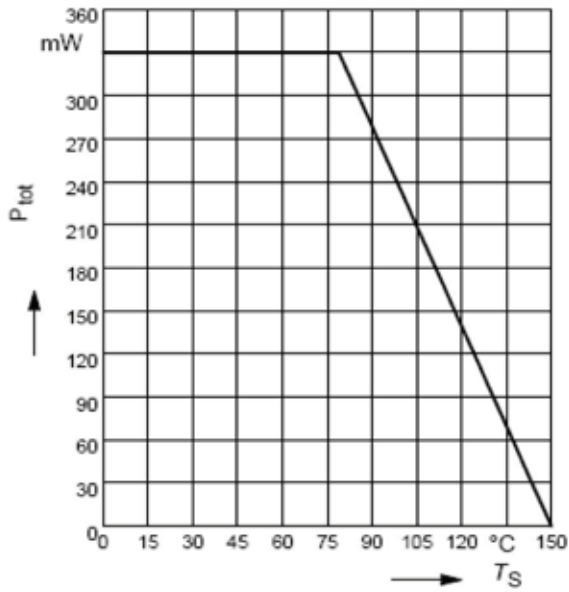
Maximum Ratings & Characteristics: Tamb=25°C unless otherwise specified

Parameter:	Symbol:	Value:	Unit:
Collector - Base Voltage - BCW67 - BCW68	V_{CBO}	-45 -60	V
Collector - Emitter Voltage - BCW67 - BCW68	V_{CEO}	-32 -45	V
Emitter - Base Voltage - BCW67 - BCW68	V_{ebo}	-5 -5	V
DC Collector Current	I_C	-1	A
Collector Current Continuous	I_C	-800	mA
Total Device Dissipation	P_D	330	mW
Junction Thermal Resistance	R_{thjS}	215	°C/W
Junction and Storage Temperature	T_j, T_{stg}	-65 to +150	°C

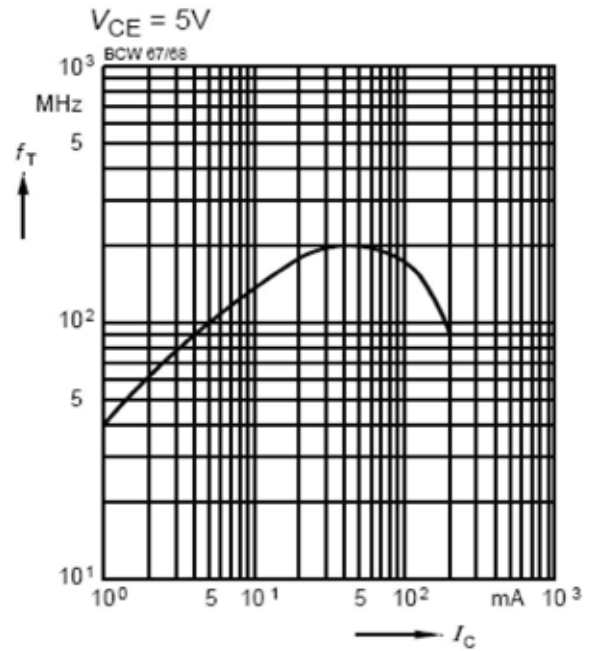
Maximum Ratings & Characteristics: Tamb=25°C unless otherwise specified

Parameter:	Symbol:	Test Conditions:	Min:	Typ:	Max:	Unit:
Collector - Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$ BCW67 BCW68	-45 -60			V
Collector - Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$ BCW67 BCW68	-32 -45			V
Emitter - Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-5			V
Collector Cut-off Current	I_{CBO}	$V_{CB} = -32V, I_E = 0$ BCW67 $V_{CB} = -45V, I_E = 0$ BCW68			-20 -20	nA nA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -4V, I_C = 0$			-20	nA
DC Current Gain	A/F B/G C/H h_{FE}	$V_{CE} = -10V, I_C = -0.1mA$	35 50 80			
DC Current Gain	A/F B/G C/H h_{FE}	$V_{CE} = -1V, I_C = -10mA$	75 120 180			
DC Current Gain	A/F B/G C/H h_{FE}	$V_{CE} = -1V, I_C = -100mA$	100 160 250	160 250 350	250 400 630	
DC Current Gain	A/F B/G C/H h_{FE}	$V_{CE} = -2V, I_C = -500mA$	35 60 100			
Collector - Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100mA, I_B = -10mA$ $I_C = -500mA, I_B = -50mA$			-0.3 -0.7	V V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -100mA, I_B = -10mA$ $I_C = -500mA, I_B = -50mA$			-1.25 -2	V V
Transition Frequency	f_T	$V_{CE} = -5V, I_C = -50mA$ $f = 20MHz$		200		MHz

Total power dissipation $P_{tot} = f(T_S)$

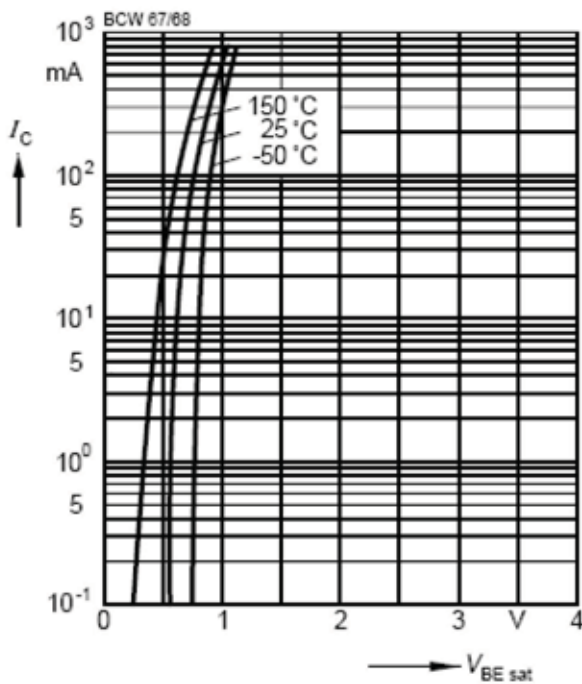


Transition frequency $f_T = f(I_C)$



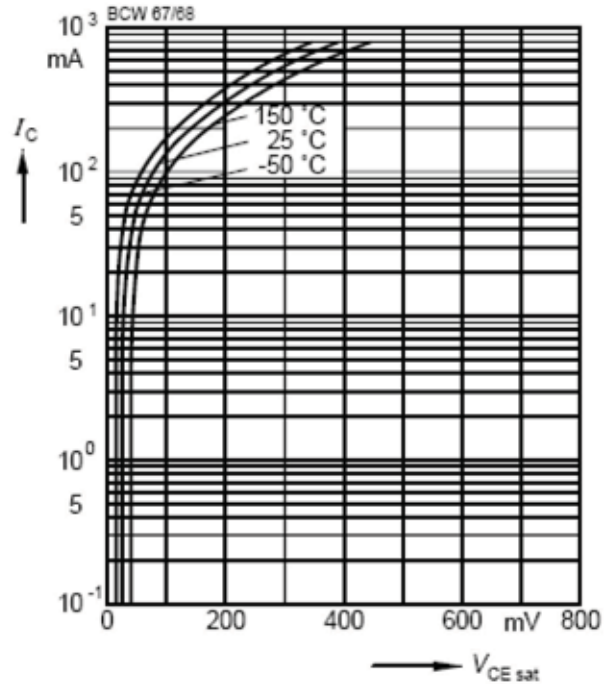
Base-emitter saturation voltage

$I_C = f(V_{BEsat}), h_{FE} = 10$



Collector-emitter saturation voltage

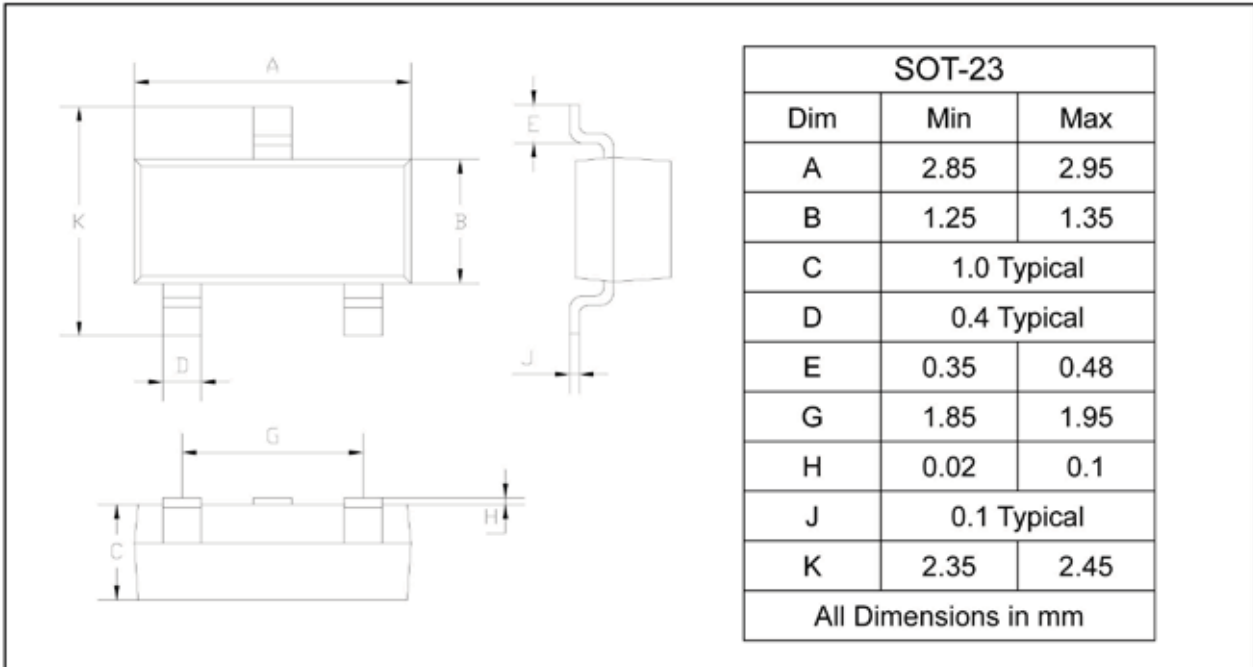
$I_C = f(V_{CEsat}), h_{FE} = 10$



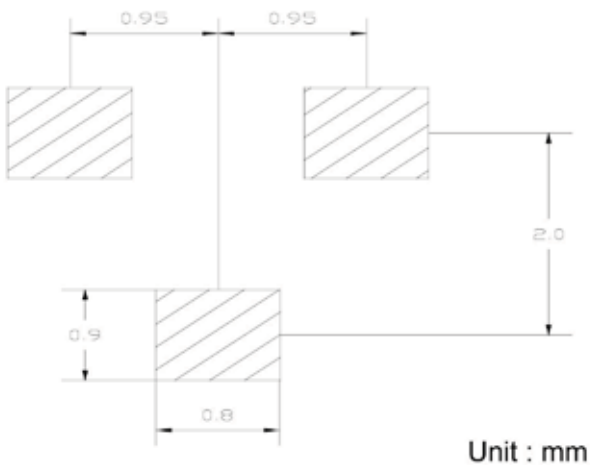
Package Outline

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BCW67/68	SOT-23	3000/Tape&Reel