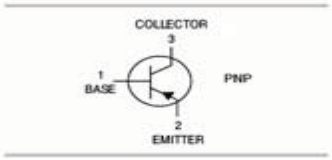
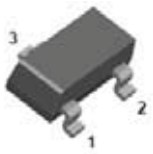
PNP General Purpose Amplifier: BCW67/BCW68

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

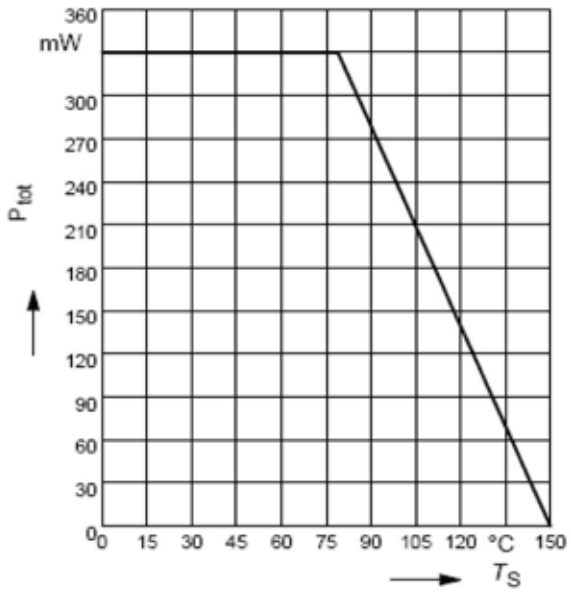
Maximum Ratings & Characteristics: Tamb=25°C unless otherwise specified

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

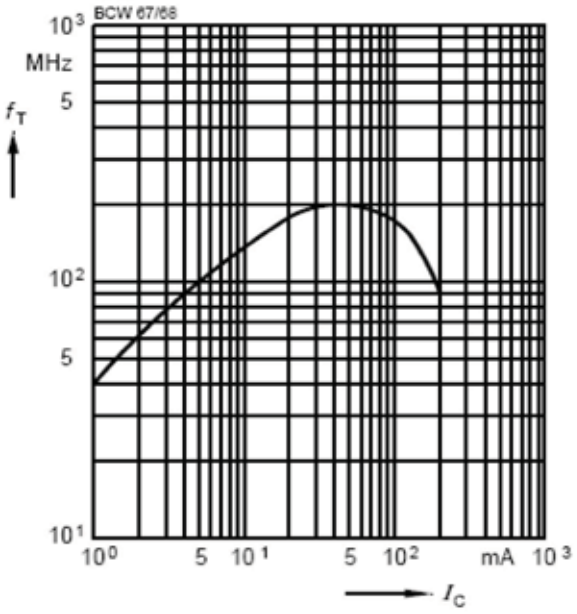
Parameter:		Symbol:	Test Conditions:	Min:	Typ:	Max:	Unit:
Collector - Base Breakdown Voltage		$V_{(BR)CBO}$	I_C=-10µA, I_E=0 BCW67 BCW68	-45 -60			V
Collector - Emitter Breakdown Voltage		$V_{(BR)CEO}$	I_C=-10mA, I_B=0 BCW67 BCW68	-32 -45			V
Emmiter - Base Breakdown Voltage		$V_{(BR)EBO}$	I_E=-10µA, 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 $P_{tot} = f(T_S)$



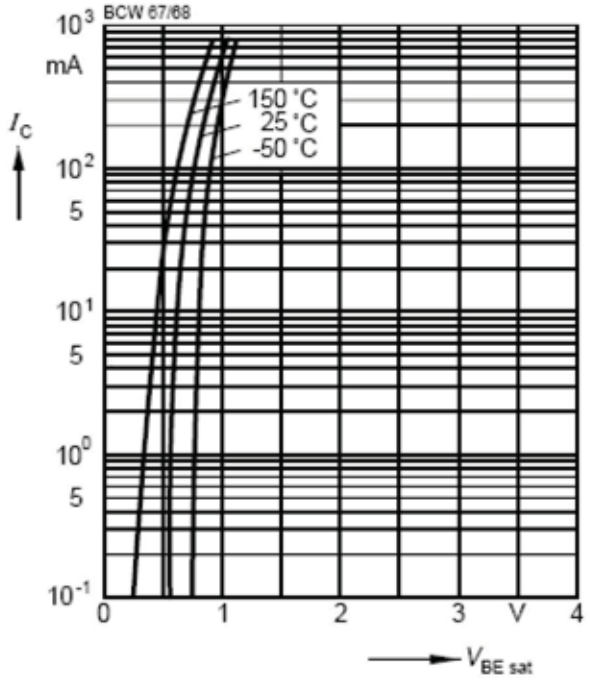
Transition frequency $f_T = f(I_C)$

$V_{CE} = 5V$



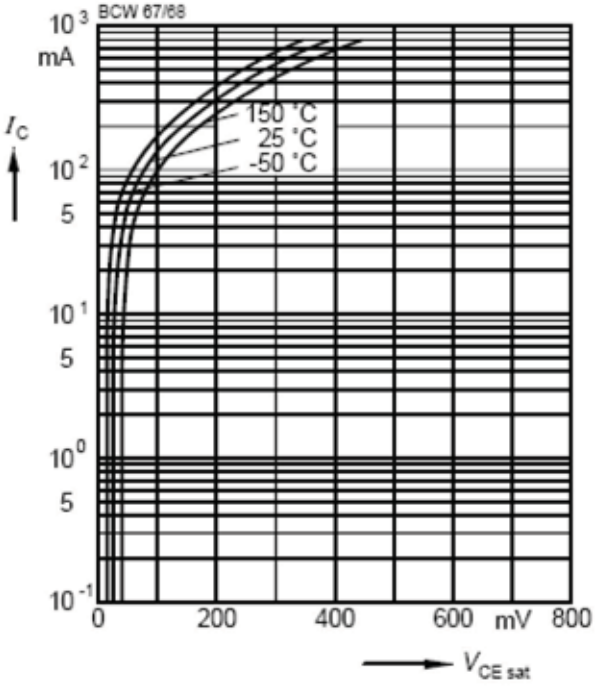
Base-emitter saturation voltage

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



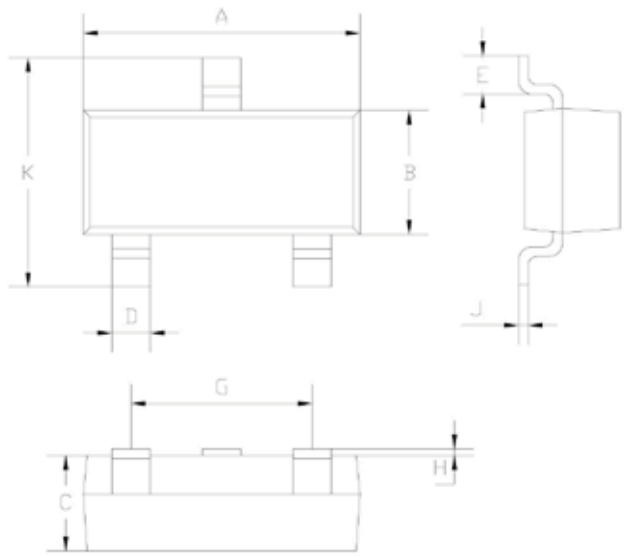
Collector-emitter saturation voltage

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



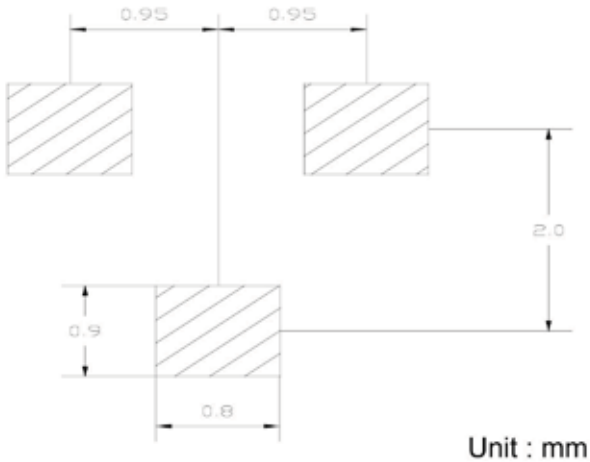
Package Outline

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1 Typical	
K	2.35	2.45
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

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