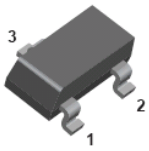
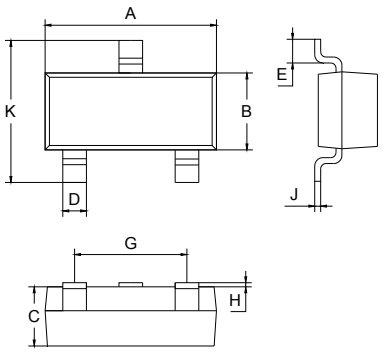
BCW67/BCW68
PNP General Purpose Amplifier

RoHS COMPLIANT





SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

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.

ORDERING INFORMATION

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

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	Parameter	BCW67	BCW68	Unit
V_{CBO}	Collector-Base Voltage	-45	-60	V
V_{CEO}	Collector-Emitter Voltage	-32	-45	V
V_{EBO}	Emitter-Base Voltage	--5	-5	V
I_{CM}	Peak collector current	-1		A
I_C	Collector Current -Continuous	-800		mA
P_D	Total Device Dissipation	330		mW
R_{thJS}	Junction thermal resistance	215		℃/W
T_j,T_{stg}	Junction and Storage Temperature	-65 to +150		℃

ELECTRICAL CHARACTERISTICS @ Ta=25℃ 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
Emitter-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 V_{CB}=-45V I_E=0	BCW67 BCW68			-20 -20	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
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

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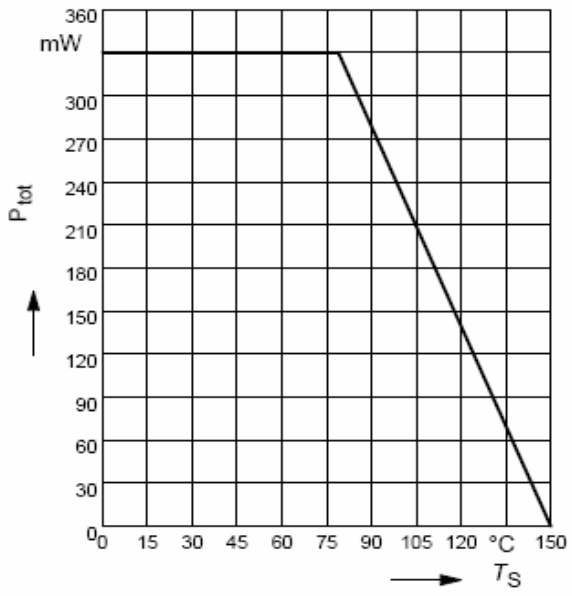
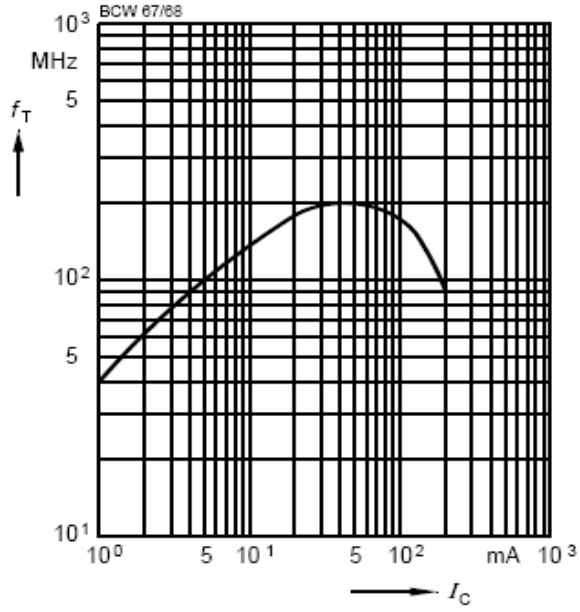
TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

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



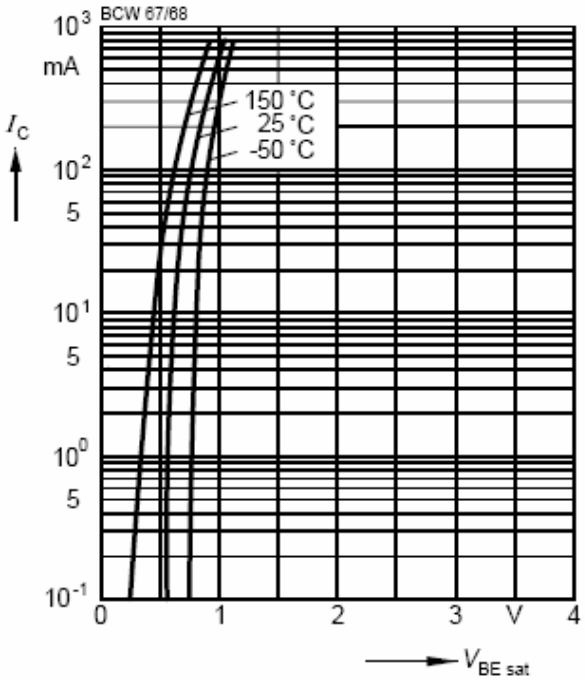
Transition frequency $f_T = f(I_C)$

$V_{CE} = 5V$



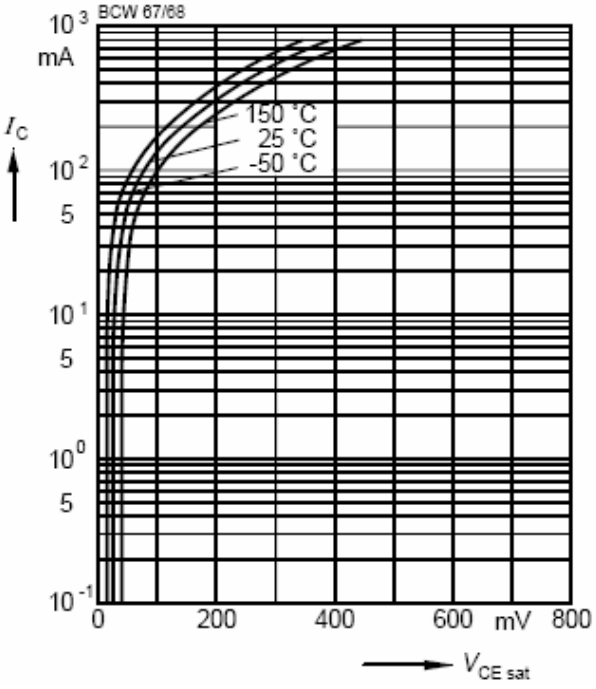
Base-emitter saturation voltage

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



Collector-emitter saturation voltage

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



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