

FEATURES

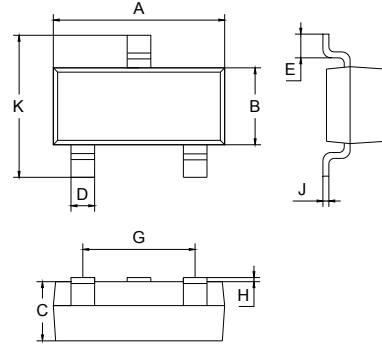
- For general AF applications.
- High current gain.
- Low collector-emitter saturation voltage.
- Complementary types:BCW65,BCW66(NPN).

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



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		

MAXIMUM RATING @ Ta=25°C 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		°C/W
T _j , T _{stg}	Junction and Storage Temperature	-65 to +150		°C

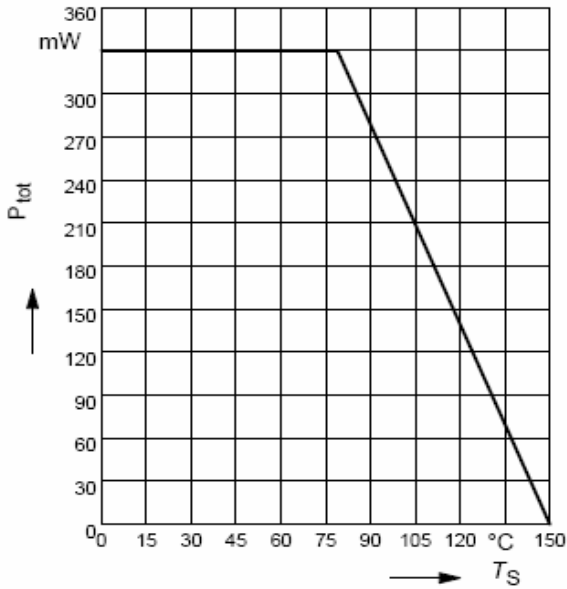
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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
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 BCW67 V _{CB} =-45V I _E =0 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
Transition frequency	f _T	V _{CE} =-5V I _C =-50mA f=20MHz		200		MHz

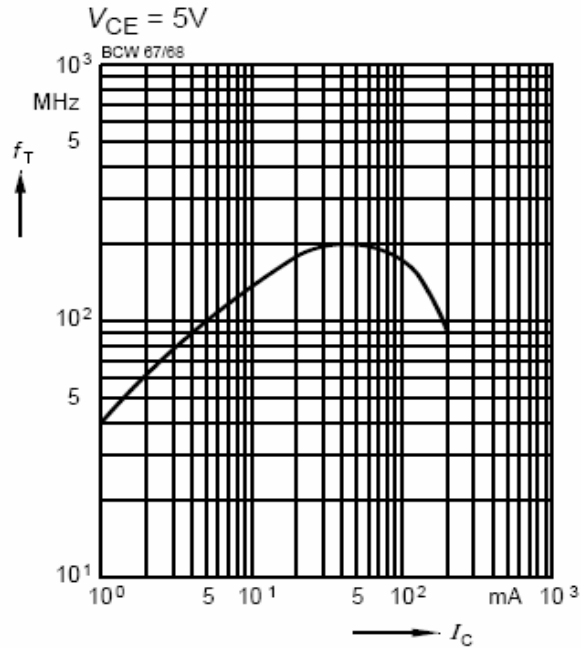


TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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

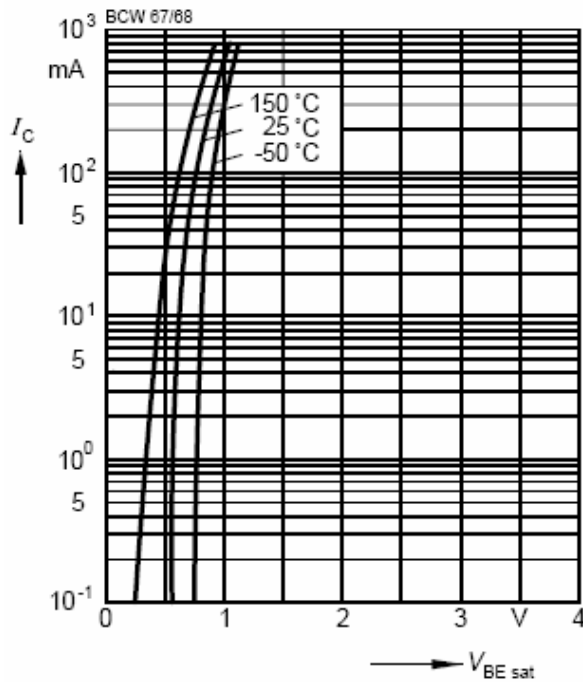


Transition frequency $f_T = f(I_C)$



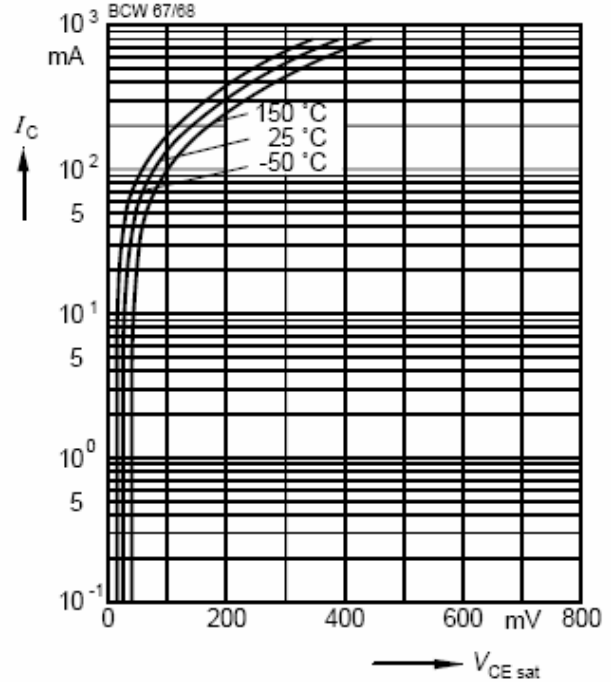
Base-emitter saturation voltage

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



Collector-emitter saturation voltage

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



Package	Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
SOT-23	3000pcs	7inch	45,000pcs	203×203×195	180,000pcs	438×438×220