

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- High Current and Low Voltage

APPLICATIONS

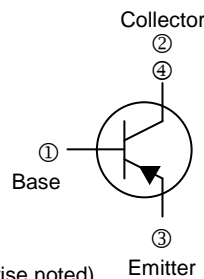
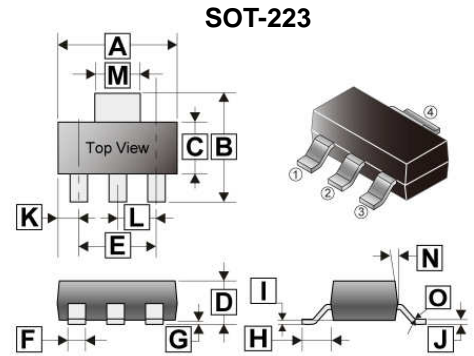
- General Purpose Switching and Amplification
- Power Applications Such As Audio Output Stages

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-223	2.5K	13 inch

ORDER INFORMATION

Part Number	Type
BCP69-C	Lead (Pb)-free and Halogen-free



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	5.90	6.70	G	-	0.18
B	6.70	7.30	H	2.00	REF.
C	3.30	3.80	J	0.20	0.40
D	1.42	1.90	K	1.10	REF.
E	4.45	4.75	L	2.30	REF.
F	0.60	0.85	M	2.80	3.20

ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

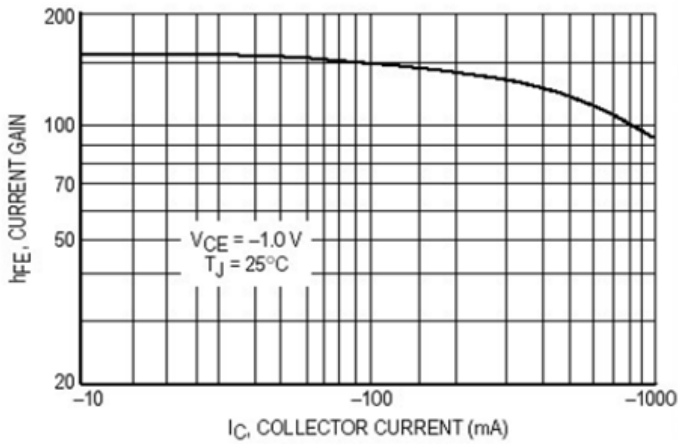
Parameter	Symbol	Rated	Unit
Collector-Base Voltage	V _{CBO}	-32	V
Collector-Emitter Voltage	V _{CEO}	-20	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current-Continuous	I _C	-1	A
Collector Power Dissipation	P _C	1	W
Thermal Resistance from Junction to Ambient	R _{θJA}	125	°C/W
Junction and Storage Temperature	T _J , T _{STG}	-55~150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

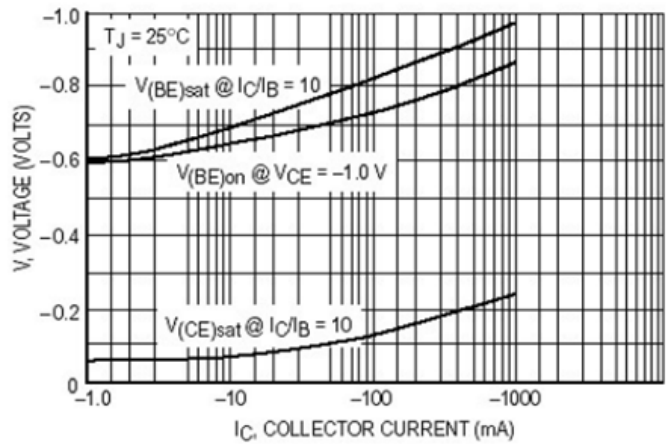
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV _{CBO}	-32	-	-	V	I _C = -100μA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CEO}	-20	-	-	V	I _C = -1mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EBO}	-5	-	-	V	I _E = -100μA, I _C =0
Collector Cut-Off Current	I _{CBO}	-	-	-100	nA	V _{CB} = -25V, I _E =0
Emitter Cut-Off Current	I _{EBO}	-	-	-100	nA	V _{EB} = -5V, I _C =0
DC Current Gain	h _{FE1}	85	-	375		V _{CE} = -1V, I _C = -0.5A
	h _{FE2}	60	-	-		V _{CE} = -1V, I _C = -1A
	h _{FE3}	50	-	-		V _{CE} = -10V, I _C = -5mA
	h _{FE4}	140	-	230		V _{CE} = -1.8V, I _C = -10mA
Collector-Emitter Saturation Voltage	V _{CE(sat)}	-	-	-500	mV	I _C = -1A, I _B = -100mA
Base-Emitter Voltage	V _{BE1}	-	-	-0.68	V	V _{CE} = -10V, I _C = -5mA
	V _{BE2}	-	-	-1		V _{CE} = -1V, I _C = -1A
Transition Frequency	f _T	-	40	-	MHz	V _{CE} = -5V, I _C = -10mA, f=100MHz
Collector Output Capacitance	C _{ob}	-	48	-	pF	V _{CB} = -5V, I _E =0, f=1MHz

CHARACTERISTIC CURVES

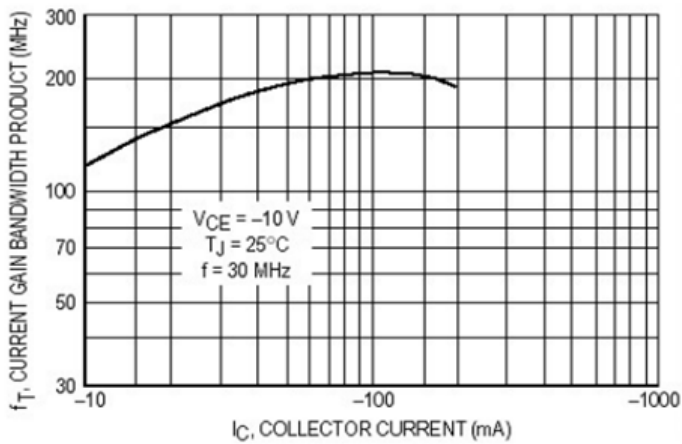
DC Current Gain & Collector Current



Saturation and "ON" Voltage



Current Gain Bandwidth Product



Capacitances & Reverse Voltage

