

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

FEATURES

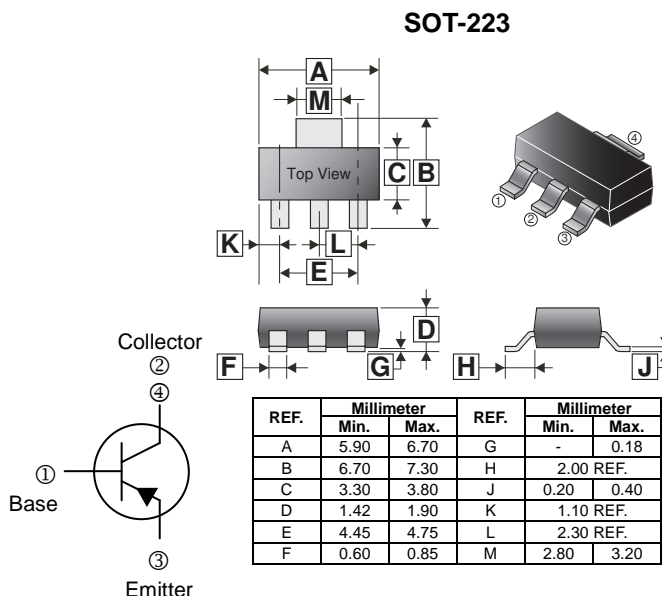
- For AF Driver and Output Stages
- High Collector Current
- Low Collector-Emitter Saturation Voltage

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-223	2.5K	13 inch

ORDER INFORMATION

Part Number	Type
BCP51-16-C	Lead (Pb)-free and Halogen-free



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

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V _{CB0}	-45	V
Collector-Emitter Voltage	V _{CEO}	-45	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current-Continuous	I _C	-1	A
Collector Power Dissipation	P _D	1.5	W
Thermal Resistance from Junction to Ambient	R _{θJA}	94	°C/W
Storage Temperature Range	T _{STG}	-65~150	°C

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

Parameter	Symbol	Min.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	V _{(BR)CB0}	-45	-	V	I _C = -0.1mA, I _E =0
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	-45	-	V	I _C = -10mA, I _B =0
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	-5	-	V	I _C = -10μA, I _E =0
Collector Cut-Off Current	I _{CB0}	-	-100	nA	V _{CB} = -30V, I _E =0
DC Current Gain	h _{FE}	25	-		V _{CE} = -2V, I _C = -5mA
		100	250		V _{CE} = -2V, I _C = -150mA
		25	-		V _{CE} = -2V, I _C = -500mA
Collector-Emitter Saturation Voltage	V _{CE(sat)}	-	-0.5	V	I _C = -500mA, I _B = -50mA
Base-Emitter Voltage	V _{BE}	-	-1	V	V _{CE} = -2V, I _C = -500mA
Transition Frequency	f _T	100	-	MHz	V _{CE} = -10V, I _C = -50mA, f=100MHz

CHARACTERISTIC CURVES

Static Characteristic

