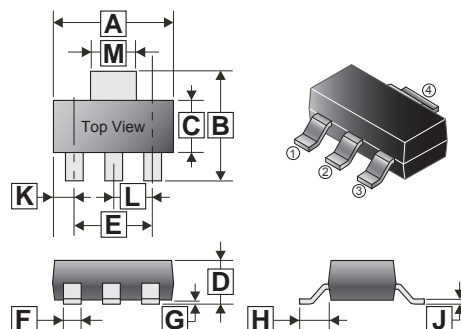


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- For AF driver and output stages
- High collector current
- Low collector-emitter saturation voltage

SOT-223

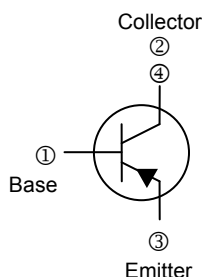


CLASSIFICATION OF h_{FE}

Product-Rank	BCP53-16
Range	100~250

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-223	1K	7 inch



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 specified)

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V _{CBO}	-100	V
Collector-Emitter Voltage	V _{CEO}	-80	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 Condition
Collector-Base Breakdown Voltage	V _{(BR)CBO}	-100	-	V	I _C = -0.1mA, I _E =0
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	-80	-	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 _{CBO}	-	-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(on)}	-	-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

