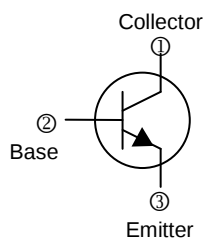


RoHS Compliant Product

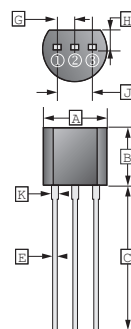
A suffix of "-C" specifies halogen & lead-free

FEATURES

The BC184 is complementary silicon planar epitaxial transistors for use in AF small signal amplifiers and drivers, as well as for low noise pre-amplifiers applications. Both types feature good linearity of DC current gain.



TO-92



REF.	Millimeter	
	Min.	Max.
A	4.40	4.70
B	4.30	4.70
C	12.70	-
D	3.30	3.81
E	0.36	0.56
F	0.36	0.51
G	1.27 TYP.	
H	1.10	-
J	2.42	2.66
K	0.36	0.76

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Collector to Base Voltage	V_{CBO}	45	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	6	V
Collector Current - Continuous	I_C	0.1	A
Collector Power Dissipation	P_C	350	mW
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	45	-	-	V	$I_C=10\mu\text{A}, I_E=0\text{A}$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	30	-	-	V	$I_C=2\text{mA}, I_B=0\text{A}$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	6	-	-	V	$I_E=0.1\text{mA}, I_C=0\text{A}$
Collector Cut-Off Current	I_{CBO}	-	-	15	nA	$V_{CB}=30\text{V}, I_E=0\text{A}$
Collector Cut-Off Current	I_{CEO}	-	-	0.1	μA	$V_{CE}=30\text{V}, I_B=0\text{A}$
Emitter Cut-Off Current	I_{EBO}	-	-	15	nA	$V_{EB}=4\text{V}, I_C=0\text{mA}$
DC Current Gain	h_{FE}	240	-	900		$V_{CE}=5\text{V}, I_C=2\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.6	V	$I_C=0.1\text{A}, I_B=5\text{mA}$
Base to Emitter Voltage	$V_{BE(sat)}$	-	-	1.2	V	$I_C=0.1\text{A}, I_B=5\text{mA}$
Collector Output Capacitance	C_{ob}	-	-	5	pF	$V_{CB}=10\text{V}, I_C=0\text{A}, f=1\text{MHz}$
Input Capacitance	C_{ib}	-	8	-	pF	$V_{BE}=0.5\text{V}, I_C=0\text{A}, f=1\text{MHz}$
Transition Frequency	f_T	150	-	-	MHz	$V_{CE}=5\text{V}, I_C=10\text{mA}, f=100\text{MHz}$
Noise Figure	NF	-	-	4	dB	$V_{CE}=5\text{V}, I_C=0.2\text{mA}, f=1\text{KHz}, R_S=2\text{W}$

CLASSIFICATION OF h_{FE}

Rank	BC184B	BC184C
Range	240-500	450-900

CHARACTERISTIC CURVES

