Elektronische Bauelemente

BC184

0.1 A, 45 V

NPN Plastic Encapsulated Transistor

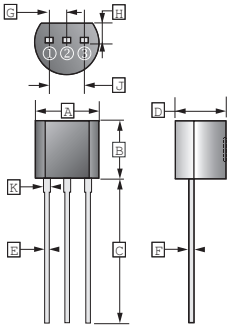
RoHS Compliant Product

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

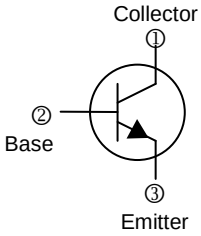
FEATURES

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℃ 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	℃

ELECTRICAL CHARACTERISTICS (T_A = 25℃ unless otherwise specified)

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

CLASSIFICATION OF h_{FE}

Rank	BC184B	BC184C
Range	240-500	450-900

CHARACTERISTIC CURVES