Elektronische Bauelemente

BCP669A

1 W, 1.5 A, 180 V

NPN Epitaxial Planar Transistor

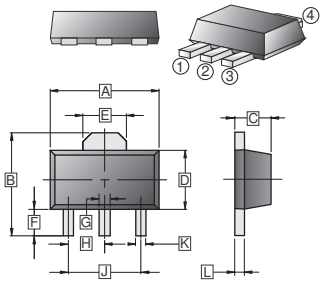
RoHS Compliant Product

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

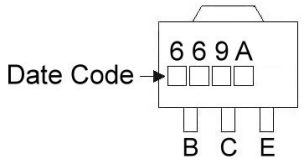
SOT-89

FEATURE

The BCP669A is designed for low frequency power amplifier.



Marking :



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.60	G	0.40	0.58
B	3.94	4.25	H	1.50 TYP	
C	1.40	1.60	J	3.00 TYP	
D	2.30	2.60	K	0.32	0.52
E	1.50	1.70	L	0.35	0.44
F	0.89	1.20			

ABSOLUTE MAXIMUM RATINGS (T_A = 25℃ unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Collector to Base Voltage	V_{CBO}	180	V
Collector to Emitter Voltage	V_{CEO}	160	V
Emitter to Base Voltage	V_{EBO}	5	V
DC Collector Current	I_C	1.5	A
Pulse Collector Current	I_C	3	A
Collector Power Dissipation	P_D	1	W
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	BV_{CBO}	180	-	-	V	I_C=1mA, I_E = 0A
Collector to Emitter Breakdown Voltage	BV_{CEO}	160	-	-	V	I_C=10mA, I_B = 0A
Emitter to Base Breakdown Voltage	BV_{EBO}	5	-	-	V	I_E=1mA, I_C = 0A
Collector Cut-Off Current	I_{CBO}	-	-	10	μA	V_{CB}=160 V, I_E = 0 A
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	1	V	I_C=600mA, I_B=50mA
Base to Emitter Saturation Voltage	$V_{BE(on)}$	-	-	1.5	V	V_{CE}=5V, I_C=150mA
DC Current Gain	h_{FE1}	60	-	200		V_{CE}=5V, I_C=150mA
DC Current Gain	h_{FE2}	30	-	-		V_{CE}=5V, I_C=500mA
Transition Frequency	f_T	-	140	-	MHz	V_{CE} = 5V, I_C = 10mA, f = 100 MHz
Collector Output Capacitance	Cob	-	14	-	pF	V_{CB} = 10V, f=1MHz

* Pulse Test: Pulse Width≦380μs, Duty Cycle≦2%

CLASSIFICATION OF h_{FE}

Rank	B	C
h_{FE1}	60~120	100~200

CHARACTERISTIC CURVES