

PNP General Purpose Amplifier

BF821/BF823

FEATURES

- Low current(max.-50mA).
- High voltage(max.-300V).

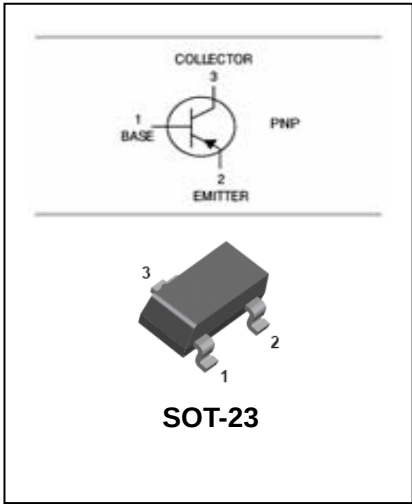


APPLICATIONS

- Telephony and professional communication equipment.

ORDERING INFORMATION

Type No.	Marking	Package Code
BF821	1W	SOT-23
BF823	1Y	SOT-23



MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	BF821 -300	V
		BF823 -250	
V _{CEO}	Collector-Emitter Voltage	BF821 -300	V
		BF823 -250	
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-50	mA
P _C	Collector Dissipation	250	mW
T _j , T _{stg}	Junction and Storage Temperature	-65 to+150	℃

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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A$ $I_E = 0$ BF821 BF823	-300 -250		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA$ $I_B = 0$ BF821 BF823	-300 -250		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A$ $I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -200V$ $I_E = 0$		-10	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V$ $I_C = 0$		-50	nA
DC current gain	h_{FE}	$V_{CE} = -20V$ $I_C = -25mA$	50		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -30mA$ $I_B = -5mA$		-0.8	V
Transition frequency	f_T	$V_{CE} = -10V$ $I_C = -10mA$ $f = 100MHz$	60		MHz
Feedback capacitance	C_{re}	$V_{CB} = -30V$ $I_C = 0, f = 1MHz$		1.6	pF

PACKAGE OUTLINE

Plastic surface mounted package

SOT-23

Top and side views of the SOT-23 package. Dimension A is the width, B is the height, and D is the lead width. Dimension K is the total height from the base to the top of the package body.

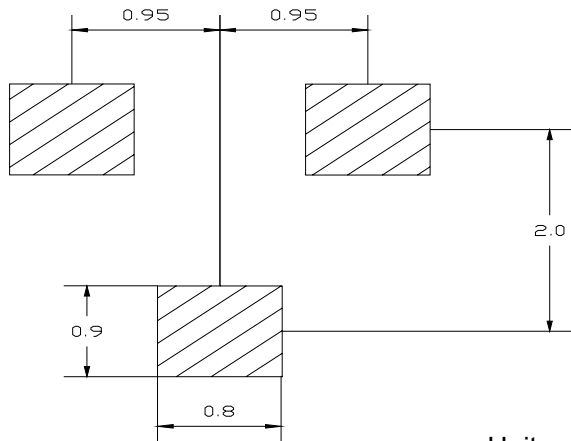
Side view of the SOT-23 package. Dimension E is the lead height and J is the lead thickness.

Bottom view of the SOT-23 package. Dimension G is the distance between leads, H is the lead height, and C is the lead thickness.

SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1Typical	
K	2.35	2.45
All Dimensions in mm		

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SOLDERING FOOTPRINT

Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
BF821/823	SOT-23	3000/Tape&Reel