BF821/BF823 TRANSISTOR (PNP)

1.BASE
2.COLLECTOR
3.EMITTER

SOT-23-3

FEATURES

- Low current (max.-50 mA)
- High voltage (max.-300V)
- Telephony and professional communication equipment.

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter		Value	Unit
V_{CBO}	Collector-Base Voltage	BF821 BF823	-300 -250	V
V_{CEO}	Collector-Emitter Voltage	BF821 BF823	-300 -250	V
V_{EBO}	Emitter-Base Voltage		-5	V
I_C	Collector Current -Continuous		-50	mA
P_C	Collector Power Dissipation		0.25	W
T_J,T_{stg}	Operation Junction and Storage Temperature Range		-55~150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA, 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= -100μA, I_C=0		-5		V
Collector cut-off current	I_{CBO}	V_{CB}=-200V,I_E=0			-0.01	μA
Emitter cut-off current	I_{EBO}	V_{EB}= -5V,I_C=0			-0.05	μA
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
Collector output capacitance	C_{ob}	V_{CB}=-30V,I_E=0,f=1MHz			1.6	pF