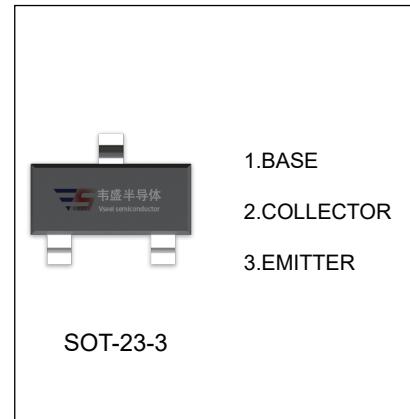


BF820/BF822 TRANSISTOR (NPN)

FEATURES

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



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage BF820 BF822	300 250	V
V_{CEO}	Collector-Emitter Voltage BF820 BF822	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	°C

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

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$ BF820 BF822	300 250		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$ BF820 BF822	300 250		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E= 100\mu\text{A}, I_C=0$	5		V
Collector cut-off current	I_{CBO}	$V_{CB}=200\text{V}, I_E=0$		0.01	μA
Emitter cut-off current	I_{EBO}	$V_{EB}= 5\text{V}, I_C=0$		0.05	μA
DC current gain	h_{FE}	$V_{CE}= 20\text{V}, I_C=25\text{mA}$	50		
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C=30\text{mA}, I_B= 5\text{mA}$		0.6	V
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C= 10\text{mA}, f=100\text{MHz}$	60		MHz
Collector output capacitance	C_{ob}	$V_{CB}=30\text{V}, I_E=0, f=1\text{MHz}$		1.6	pF