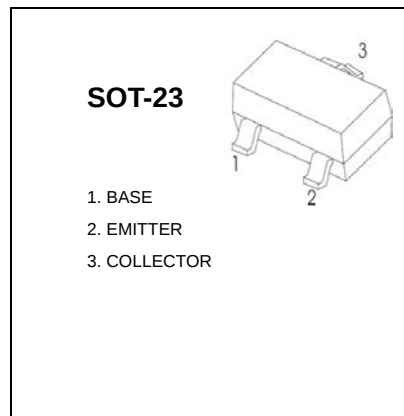


Plastic-Encapsulate Transistors

TRANSISTOR (NPN)

FEATURES

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



MARKING: BF820:1V
BF822:1X

MAXIMUM RATINGS (T_a=25°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°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100μA, I _E =0 BF820 BF822	300 250		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0 BF820 BF822	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		0.6	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

Typical Characteristics

