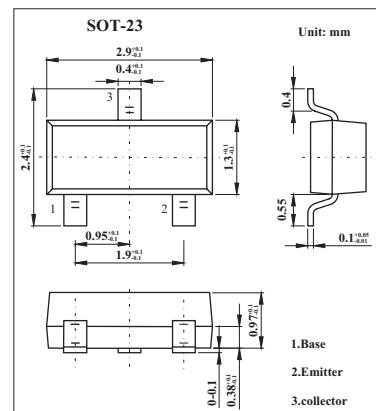


BF821, BF823

■ Features

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



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage BF821	V _{CBO}	-300	V
BF823	V _{CBO}	-250	V
Collector-emitter voltage BF821	V _{CCEO}	-300	V
BF823	V _{CCEO}	-250	V
Emitter-base voltage	V _{EBO}	-5	V
Collector current	I _C	-50	mA
Peak collector current	I _{CM}	-100	mA
Peak base current	I _{BM}	-50	mA
Total power dissipation *	P _{tot}	250	mW
Storage temperature	T _{stg}	-65 to +150	°C
Junction temperature	T _j	150	°C
Operating ambient temperature	T _{amb}	-65 to +150	°C
Thermal resistance from junction to ambient *	R _{th j-a}	500	K/W

* Transistor mounted on an FR4 printed-circuit board.

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I _{CCBO}	I _E = 0; V _{CB} = -200 V			-10	nA
		I _E = 0; V _{CB} = -200 V; T _j = 150 °C			-10	μA
Emitter cutoff current	I _{CEBO}	I _C = 0; V _{EB} = -5 V			-50	nA
DC current gain	h _{FE}	I _C = -25 mA; V _{CE} = -20 V	50			
collector-emitter saturation voltage	V _{CEsat}	I _C = -30 mA; I _B = -5 mA			-800	mV
Feedback capacitance	C _{re}	I _C = I _B = 0; V _{CB} = -30 V; f = 1 MHz			1.6	pF
Transition frequency	f _T	I _C = -10 mA; V _{CE} = -10 V; f = 100 MHz	60			MHz

■ hFE Classification

TYPE	BF821	BF823
Marking	1W	1Y