

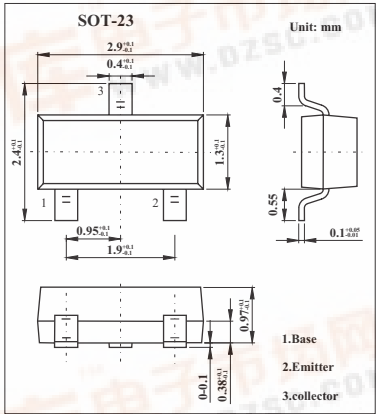
SMD Type

Transistors

PNP High-Voltage Transistors
BF821,BF823

■ Features

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



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	BF821 BF823 V _{CB0}	-300	V
		-250	V
Collector-emitter voltage	BF821 BF823 V _{CEO}	-300	V
		-250	V
Emitter-base voltage	V _{EB0}	-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	℃
Junction temperature	T _J	150	℃
Operating ambient temperature	R _{amb}	-65 to +150	℃
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℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I _{CBO}	I _E = 0; V _{CB} = -200 V			-10	nA
		I _E = 0; V _{CB} = -200 V; T _J = 150 ℃			-10	μA
Emitter cutoff current	I _{EBO}	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 _E = 0; V _{CB} = -30 V; f = 1 MHz			1.6	pF
Transition frequency	f _r	I _C = -10 mA; V _{CE} = -10 V; f = 100 MHz	60			MHz

■ hFE Classification

TYPE	BF821	BF823
Marking	1W	1Y

