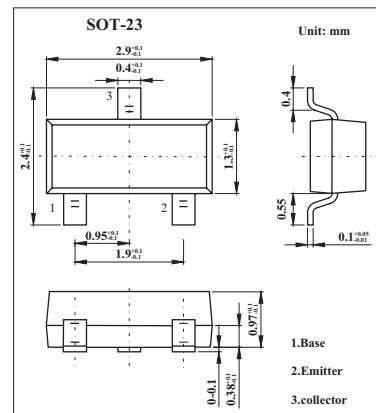


PNP General Purpose Transistor

2PB709A

■ Features

- Low current (max. 100 mA)
- Low voltage (max. 45 V).



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CBO}	-45	V
Collector-emitter voltage	V _{CEO}	-45	V
Emitter-base voltage	V _{EBO}	-6	V
Collector current (DC)	I _C	-100	mA
Peak collector current	I _{CM}	-200	mA
Peak base current	I _{BM}	-100	mA
Total power dissipation(T _{amb} ≤ 25°C; *)	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 PCB.

2PB709A

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Max	Unit
Collector cut-off current	I _{CBO}	I _E = 0; V _{CB} = -45 V		-10	nA
		I _E = 0; V _{CB} = -45 V; T _j = 150 °C		-5	µA
Emitter cut-off current	I _{EO}	I _C = 0; V _{EB} = -5 V		-10	nA
DC current gain	h _{FE}	I _C = -2 mA; V _{CE} = -10 V	160	260	
			210	340	
			290	460	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -100 mA; I _B = -10 mA *		-500	mV
Collector capacitance	C _c	I _E = i _e = 0; V _{CB} = -10 V; f = 1 MHz		5	pF
Transition frequency	f _T	I _C = -1 mA; V _{CE} = -10 V; f = 100 MHz	60		MHz
			70		
			80		

* Pulse test: t_p ≤ 300 µs; δ ≤ 0.02.

■ hFE Classification

TYPE	2PB709AQ	2PB709AR	2PB709AS
Marking	BQ	BR	BS