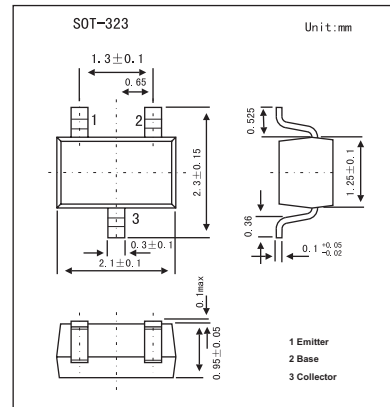


2PB709AW

■ Features

- High collector current (max. 100 mA).
- Low collector-emitter saturation voltage (max. 500 mV).



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	-45	V
Collector-emitter voltage	V _{CEO}	-45	V
Emitter-base voltage	V _{EB0}	-6	V
Collector current	I _C	-100	mA
Peak collector current	I _{CM}	-200	mA
Total power dissipation	P _{tot}	200	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}	625	K/W

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	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 _{EBO}	I _C = 0; V _{EB} = -5 V			-10	nA
DC current gain 2PB709AQW 2PB709ARW 2PB709ASW	h _{FE}	I _C = -2 mA; V _{CE} = -10 V	160 210 290	260 340 460		
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 2PB709AQW 2PB709ARW 2PB709ASW	f _T	I _C = -1 mA; V _{CE} = -10 V; f = 100 MHz	60 70 80			MHz

* Pulse test: t_p ≤ 300 µs; δ ≤ 0.02.

■ hFE Classification

TYPE	2PB709AQW	2PB709ARW	2PB709ASW
Marking	N5	N7	N9