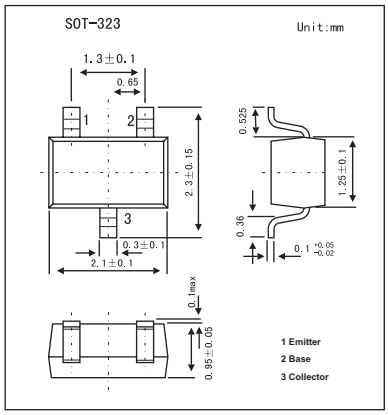
PNP General Purpose Transistor

2PB709AW



■ Features

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

■ Absolute Maximum Ratings Ta = 25℃

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	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	℃
Junction temperature	T_j	150	℃
Operating ambient temperature	T_{amb}	-65 to +150	℃
Thermal resistance from junction to ambient	$R_{th\ j\text{-}a}$	625	K/W

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	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 ℃			-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 = ie = 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: tp ⩽ 300 μs; δ⩽ 0.02.

■ h_{FE} Classification

TYPE	2PB709AQW	2PB709ARW	2PB709ASW
Marking	N5	N7	N9