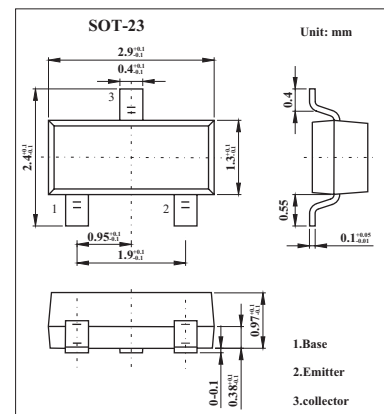


PNP General Purpose Transistor

2PB710A

■ Features

- High current (max. 500 mA)
- Low voltage (max. 50 V).



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-60	V
Collector-emitter voltage	V_{CE0}	-50	V
Emitter-base voltage	V_{EB0}	-5	V
Collector current (DC)	I_C	-500	mA
Peak collector current	I_{CM}	-1	A
Peak base current	I_{BM}	-200	mA
Total power dissipation $T_{amb} \leq 25^\circ\text{C}; *$	P_{tot}	250	mW
Storage temperature	T_{stg}	-65 to +150	$^\circ\text{C}$
Junction temperature	T_j	150	$^\circ\text{C}$
Operating ambient temperature	T_{amb}	-65 to +150	$^\circ\text{C}$
Thermal resistance from junction to ambient *	$R_{th\ j-a}$	500	K/W

* Transistor mounted on an FR4 printed-circuit board.

2PB710A

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cut-off current	ICBO	IE = 0; VCB = -60 V			-10	nA
		IE = 0; VCB = -60 V; Tj = 150 °C			-5	μA
Emitter cut-off current	IEBO	IC = 0; VEB = -5 V			-10	nA
DC current gain	2PB710AQ	IC = -150 mA; VCE = -10 V*	85		170	
	2PB710AR		120		240	
	2PB710AS		170		340	
DC current gain		IC = -500 mA; VCE = -10 V; *	40			
Collector-emitter saturation voltage	VCEsat	IC = -300 mA; IB = -30 mA *			-600	mV
Base-emitter saturation voltage	VBEsat	IC = -300 mA; IB = -30 mA *			-1.5	V
Collector capacitance	Cc	IE = i _e = 0; VCB = -10 V; f = 1 MHz			15	pF
Transition frequency	2PB710AQ	IC = -50 mA; VCE = -10 V; f = 100 MHz*	100			MHz
	2PB710AR		120			
	2PB710AS		140			

*. Pulse test: tp ≤ 300 μs; δ ≤ 0.02.

■ Marking

Type Number	2PB710AQ	2PB710AR	2PB710AS
Marking	DQ	DR	DS