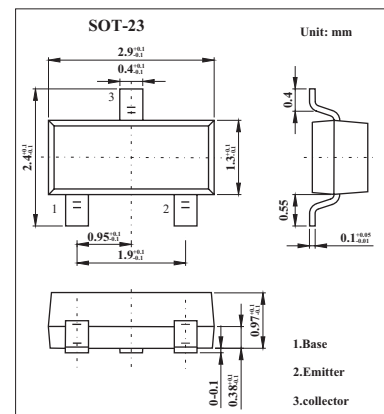


PNP General Purpose Transistor

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_{CBO}	-60	V
Collector-emitter voltage	V_{CEO}	-50	V
Emitter-base voltage	V_{EBO}	-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	I _{CBO}	I _E = 0; V _{CB} = -60 V			-10	nA
		I _E = 0; V _{CB} = -60 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	2PB710AQ	I _C = -150 mA; V _{CE} = -10 V*	85		170	
	2PB710AR		120		240	
	2PB710AS		170		340	
DC current gain		I _C = -500 mA; V _{CE} = -10 V; *	40			
Collector-emitter saturation voltage	V _{CEsat}	I _C = -300 mA; I _B = -30 mA *			-600	mV
Base-emitter saturation voltage	V _{BEsat}	I _C = -300 mA; I _B = -30 mA *			-1.5	V
Collector capacitance	C _c	I _E = i _e = 0; V _{CB} = -10 V; f = 1 MHz			15	pF
Transition frequency	2PB710AQ	I _C = -50 mA; V _{CE} = -10 V; f = 100 MHz*	100			MHz
	2PB710AR		120			
	2PB710AS		140			

*. Pulse test: t_p ≤ 300 μs; δ ≤ 0.02.

■ Marking

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