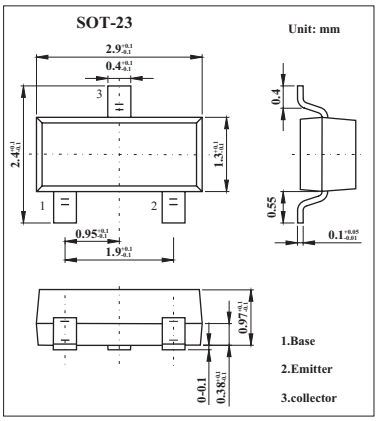
PNP General Purpose Transistor

2PB710A



Features

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

Absolute Maximum Ratings Ta = 25℃

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 Tamb≤25℃; *	P_{tot}	250	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 *	$R_{th\ j\text{-}a}$	500	K/W

* Transistor mounted on an FR4 printed-circuit board.

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■ Electrical Characteristics Ta = 25℃

Parameter		Symbol	Testconditons	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 ℃			-5	μA
Emitter cut-off current		I_{EBO}	I_C = 0; V_{EB} = -5 V			-10	nA
DC current gain	2PB710AQ	h_{FE}	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	f_T	I_C = -50 mA; V_{CE} = -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