

SMD Type

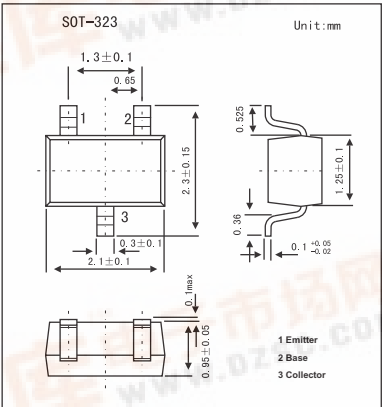
Transistors

PNP General Purpose Transistor

2PB1219A

■ Features

- High current (max. 500 mA)
- Low voltage (max. 50 V)
- Low collector-emitter saturation voltage (max. 600 mV).



■ Absolute Maximum Ratings Ta = 25℃

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	I _C	-500	mA
Peak collector current	I _{CM}	-1	A
Peak base current	I _{BM}	-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-a}	625	K/W

2PB1219A

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cut-off current	I _{CBO}	I _E = 0; V _{CB} = -20 V			-100	nA
		I _E = 0; V _{CB} = -20 V; T _j = 150 °C			-5	μA
Emitter cut-off current	I _{EBO}	I _C = 0; V _{EB} = -4 V			-100	nA
DC current gain 2PB1219AQ 2PB1219AR 2PB1219AS	h _{FE}	I _C = -150 mA; V _{CE} = -10 V; *	85 120 170	170 240 340		
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -300 mA; I _B = -30 mA; *			-600	mV
Base-emitter saturation voltage	V _{BE(sat)}	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 2PB1219AQ 2PB1219AR 2PB1219AS	f _T	I _C = 50 mA; V _{CE} = -10 V; f = 100 MHz; *	100 120 140			MHz

* Pulse test: t_p ≤ 300 μs; δ ≤ 0.02.

■ h_{FE} Classification

TYPE	2PB1219AQ	2PB1219AR	2PB1219AS
Marking	DQ	DR	DS