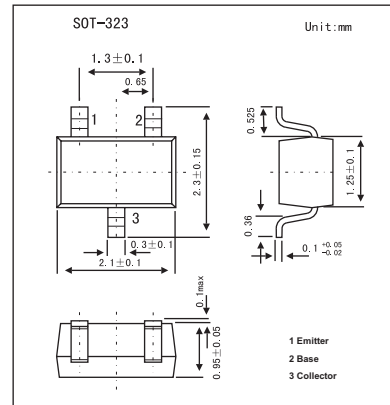


2PB1219A

■ Features

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



■ 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	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	$^\circ\text{C}$
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	$R_{th\ j-a}$	625	K/W

2PB1219A

■ Electrical Characteristics Ta = 25°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.

■ hFE Classification

TYPE	2PB1219AQ	2PB1219AR	2PB1219AS
Marking	DQ	DR	DS