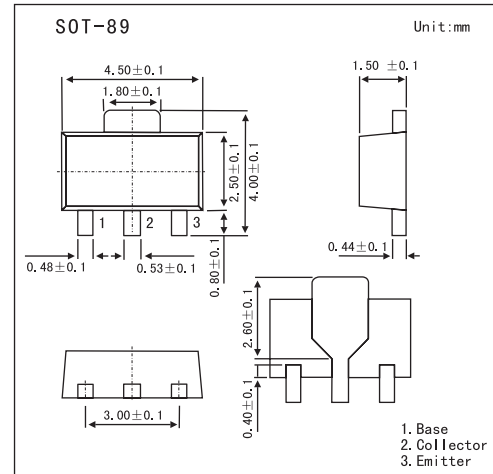


Medium power transistor

2SA1900

■ Features

- Low saturation voltage, typically $V_{CE(sat)} = \approx 0.15V$ at $I_C / I_B = \approx 500mA / \approx 50mA$
- $P_c = 2W$ (on $40 \times 40 \times 0.7mm$ ceramic board)

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

Parameter	Symbol	Rating	Unit
Collector-emitter Voltage	V_{CEO}	-60	V
Collector-base Voltage	V_{CBO}	-50	V
Emitter-base Voltage	V_{EBO}	-5	V
Collector current	I_C	-1	A
		-2	A(Pulse) *1
Collector power dissipation	P_c	0.5	W
		2	W *2
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

*1 Single pulse $P_w = 20ms$, Duty = 1/2

*2 When mounted on a $40 \times 40 \times 0.7mm$ ceramic board.

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BV_{CBO}	$I_C = -50 \mu A$	-60			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = -1mA$	-50			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E = -50 \mu A$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB} = -40V$			-0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -4V$			-0.1	μA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C / I_B = -500mA / -50mA$			-0.4	V
DC current transfer ratio	h_{FE}	$V_{CE} / I_C = -3V / -0.5A$	120		270	
Transition frequency	f_T	$V_{CE} = -5V, I_E = 50mA, f = 100MHz$		150		MHz
Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0A, f = 1MHz$		20		pF

■ Marking

Marking	ALQ
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