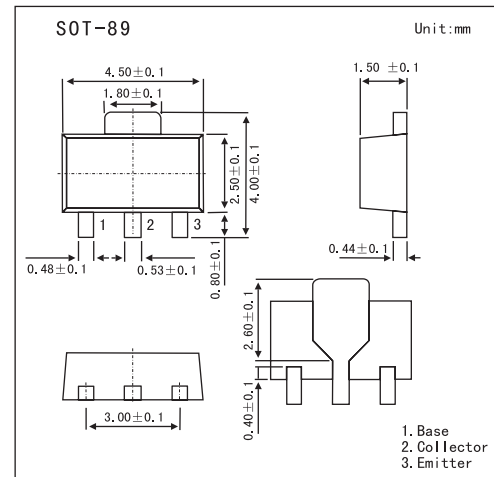


Power Transistor

2SB1443

■ Features

- Low saturation voltage. $V_{CE(sat)} = -0.35V$ (Max.) at $I_C / I_B = -1A / -50mA$.
- Excellent DC current gain characteristics.



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-50	V
Collector-emitter voltage	V_{CEO}	-50	V
Emitter-base voltage	V_{EBO}	-6	V
Collector current	I_C	-2	A
	I_{CP}^*1	-5	A
Collector dissipation	P_C^*2	1	W
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

*1 Single pulse $P_w=10ms$.

*2 Printed circuit board 1.7mm thick, collector plating $1cm^2$ or larger.

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C = -50\mu A$	-50			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = -1mA$	-50			V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -50\mu A$	-6			V
Collector cutoff current	I_{CBO}	$V_{CB} = -50V$			-0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -5V$			-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -2V, I_C = -0.5A$	120		270	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C / I_B = -1A / -50mA$		-0.15	-0.35	V
Output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0A, f = 1MHz$		36		pF
Transition frequency	f_T	$V_{CE} = -2V, I_E = 0.5A, f = 100MHz$		200		MHz