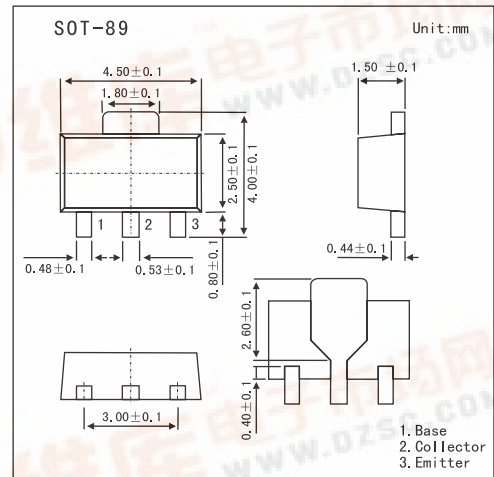


SMD Type Transistors

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	$\mu A$
Emitter cutoff current	$I_{EBO}$	$V_{EB} = -5V$			-0.1	$\mu A$
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

