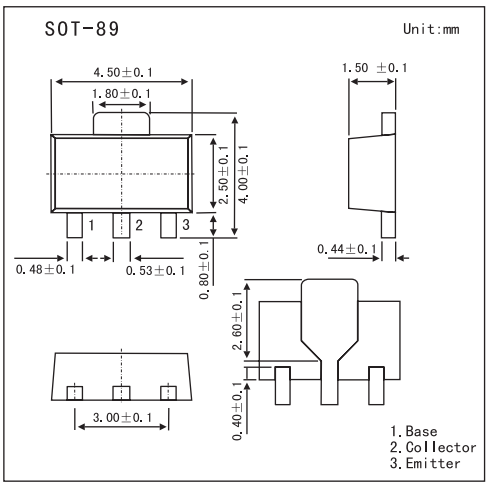
TY Semicondutor®

Product specification

2SD2210



■ Features

- Low collector-emitter saturation voltage $V_{CE(sat)}$
- Low on resistance $r_{on.}$
- High forward current transfer ratio h_{FE}.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	25	V
Collector-emitter voltage	V_{CEO}	20	V
Emitter-base voltage	V_{EBO}	12	V
Collector current	I_C	1	A
Peak collector current	I_{CP}	0.5	A
Collector power dissipation	P_C	1	W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

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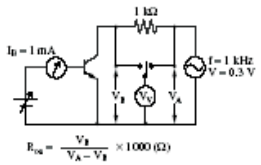
■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base cutoff current	I_{CBO}	V_{CB} = 25 V, I_E = 0			1	μA
Collector-base voltage	V_{CBO}	I_C = 10 μA, I_E = 0	25			V
Collector-emitter voltage	V_{CEO}	I_C = 1 mA, I_B = 0	20			V
Emitter-base voltage	V_{EBO}	I_E = 10 μA, I_C = 0	12			V
Forward current transfer ratio	h_{FE}	V_{CE} = 2 V, I_C = 0.5 A	200		800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 0.5 A, I_B = 20 mA		0.13	0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C = 0.5 A, I_B = 20 mA			1.2	V
Transition frequency	f_T	V_{CB} = 10 V, I_E = -50 mA, f = 200 MHz		200		MHz
Collector output capacitance	C_{ob}	V_{CB} = 10 V, I_E = 0, f = 1 MHz		10		pF
ON resistance	R_{on}			1.0		Ω

■ h_{FE} Classification

Marking	IK		
Rank	R	S	T
h_{FE}	200～350	300～500	400～800