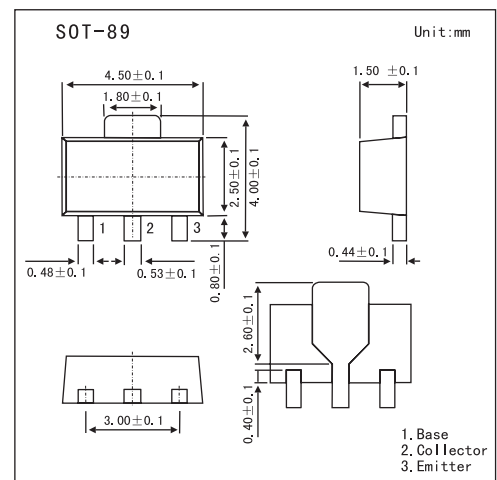


Silicon NPN Epitaxial Planar Type

2SD2210

■ Features

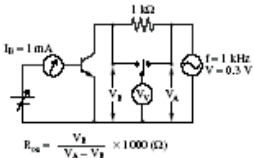
- Low collector-emitter saturation voltage $V_{CE(sat)}$
- Low on resistance r_{on} .
- High forward current transfer ratio h_{FE} .

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

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	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

2SD2210

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base cutoff current	ICBO	V _{CB} = 25 V, I _E = 0			1	μA
Collector-base voltage	V _{CB0}	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 _{EB0}	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

■ hFE Classification

Marking	IK		
Rank	R	S	T
hFE	200~350	300~500	400~800