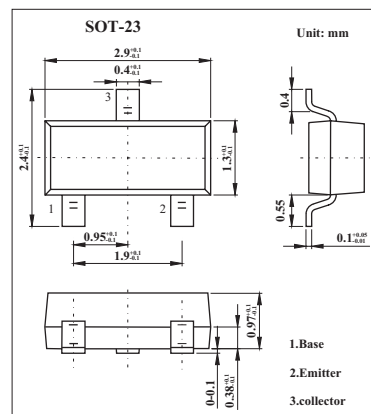


Silicon NPN Epitaxial

2SD1101

■ Features

- Low Frequency amplifier.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	25	V
Collector-emitter voltage	V_{CE0}	20	V
Emitter-base voltage	V_{EB0}	5	V
Collector current	I_C	0.7	A
Collector peak current	$i_{C(\text{peak})}$	1	A
Collector dissipation	P_C	150	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu\text{A}$, $I_E = 0$	25			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}$, $R_{BE} = \infty$	20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu\text{A}$, $I_C = 0$	5			V
Collector cutoff current	I_{CBO}	$V_{CB} = 20\text{V}$, $I_E = 0$			1.0	μA
DC current gain	h_{FE}	$V_{CE} = 1\text{V}$, $I_C = 0.15\text{A}$	85		240	
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C = 0.5\text{A}$, $I_B = 0.05\text{A}$			0.5	V
Base-emitter voltage	V_{BE}	$V_{CE} = 1\text{V}$, $I_C = 0.15\text{A}$			1.0	V

■ h_{FE} Classification

Marking	AB	AC
h_{FE}	85~170	120~240