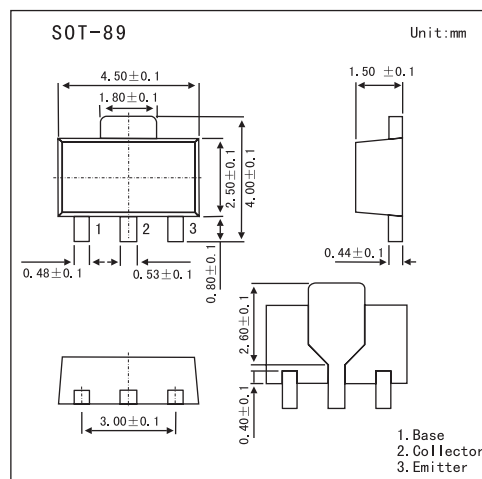


# 2SD1420

## ■ Features

- Low frequency power amplifier



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector to base voltage	V <sub>CB0</sub>	180	V
Collector to emitter voltage	V <sub>CEO</sub>	120	V
Emitter to base voltage	V <sub>EBO</sub>	5	V
Collector current	I <sub>C</sub>	1.5	A
Collector peak current	i <sub>C(peak)</sub> *1	3	A
Collector power dissipation	P <sub>C</sub> *2	1	W
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to 150	°C

\*1 PW ≤ 10ms, duty cycle ≤ 20%

\*2 Value on the alumina ceramic board (12.5 X 20 X 0.7 mm)

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector to base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 1 mA, I <sub>E</sub> = 0	180			V
Collector to emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = 10mA, R <sub>BE</sub> = ∞	120			V
Emitter to base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = 1mA, I <sub>C</sub> = 0	5			V
Collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> = 160 V, I <sub>E</sub> = 0			10	μA
DC current transfer ratio	h <sub>FE</sub>	V <sub>CE</sub> = 5 V, I <sub>C</sub> = 0.15A	60		320	
		V <sub>CE</sub> = 5 V, I <sub>C</sub> = 0.5A	30			
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 0.5A, I <sub>B</sub> = 50 mA,pulse			1.0	V
Base to emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> = 5 V, I <sub>C</sub> = 0.15mA,pulse			0.9	V

## ■ hFE Classification

Marking	EA	EB	EC
hFE	60~120	100~200	160 ~ 320