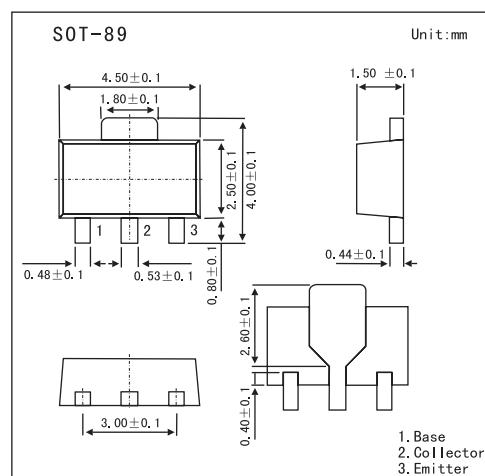


Silicon NPN Epitaxial

2SD1368

■ Features

- Low frequency power amplifier.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector to base voltage	V _{CBO}	100	V
Collector to emitter voltage	V _{CEO}	50	V
Emitter to base voltage	V _{EBO}	6	V
Collector current	I _C	1	A
Peak collector current	I _{CP} *1	1.5	A
Collector power dissipation	P _C *2	1	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

*1. PW ≤ 10 ms; d ≤ 0.02.

*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 _{(BR)CBO}	I _C = 10 μA, I _E = 0	100			V
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _C = 1 mA, R _{BE} = ∞	50			V
Emitter to base breakdown voltage	V _{(BR)EBO}	I _E = 10 μA, I _C = 0	6			V
Collector cutoff current	I _{CBO}	V _{CB} = 80 V, I _E = 0			0.1	μA
Emitter cutoff current	I _{EBO}	V _{EB} = 4 V, I _C = 0			0.1	μA
DC current transfer ratio	h _{FE}	V _{CE} = 2 V, I _C = 0.1 A	100		500	
Collector to emitter saturation voltage	V _{CES(sat)}	I _C = 1 A, I _B = 0.1 A			0.3	V
Base to emitter saturation voltage	V _{BE(sat)}	I _C = 1 A, I _B = 0.1 A			1.2	V
Gain bandwidth product	f _T	V _{CE} = 2 V, I _C = 10 mA		100		MHz
Collector output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz			20	pF

■ hFE Classification

Marking	CA	CB	CC
hFE	100~200	160~320	250~500