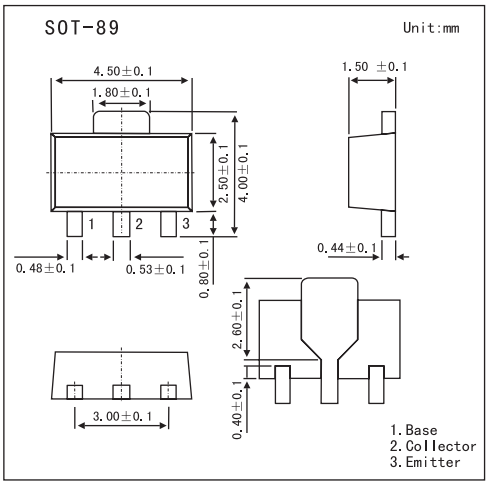
NPN Silicon epitaxial Transistor

2SD1420



■ Features

- Low frequency power amplifier

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	180	V
Collector to emitter voltage	V_{CEO}	120	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_C	1.5	A
Collector peak current	$i_{C(peak)}$*1	3	A
Collector power dissipation	P_C*2	1	W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to 150	℃

*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℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	I_C = 1 mA, I_E = 0	180			V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 10mA, R_{BE} = ∞	120			V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	I_E= 1mA, I_C = 0	5			V
Collector cutoff current	I_{CBO}	V_{CB} = 160 V, I_E = 0			10	μA
DC current transfer ratio	h_{FE}	V_{CE} = 5 V, I_C = 0.15A	60		320	
		V_{CE} = 5 V, I_C = 0.5A	30			
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = 0.5A, I_B = 50 mA,pulse			1.0	V
Base to emitter voltage	V_{BE}	V_{CE} = 5 V, I_C = 0.15mA,pulse			0.9	V

■ h_{FE} Classification

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