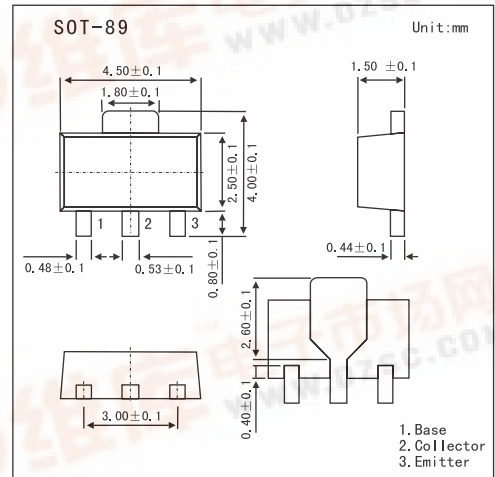


SMD Type Transistors

NPN Silicon epitaxial Transistor
2SD1420

■ Features

- Low frequency power amplifier



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector to base voltage	V _{CB0}	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	°C
Storage temperature	T _{stg}	-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	Testconditions	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

■ hFE Classification

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

