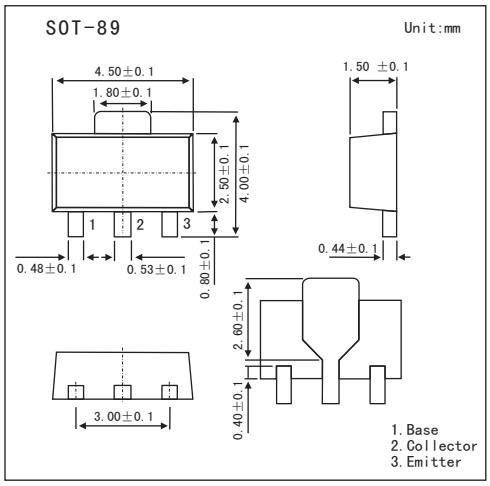
Silicon NPN Epitaxial

2SD1366A



Features

Low frequency power amplifier

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	30	V
Collector-emitter voltage	V_{CEO}	25	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	1	A
Total power dissipation	P_C*	1	W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* Value on the alumina ceramic board (12.5 × 20 × 0.7 mm)

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	I_C = 10 μA, I_E = 0	30			V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 1 mA, I_B = 0	25			V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	I_E = 10 μA, I_C = 0	5			V
Collector cutoff current	I_{CBO}	V_{CB} = 250V,I_B=0			0.1	μA
Emitter cutoff current	I_{EBO}	V_{EB} = 4 V, I_C = 0			0.1	μA
DC current gain	h_{FE}	V_{CE} =2V,Ic=500mA	85		240	
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = 0.8 A, I_B = 80mA			0.3	V
Base to emitter saturation voltage	$V_{BE(sat)}$	I_C = 0.8 A, I_B = 80mA			1	V
Transition frequency	f_T	V_{CE} = 2V ,Ic=500mA		240		MHz
Output Capacitance	C_{ob}	V_{CB} = 10 V, I_E = 0, f = 1.0 MHz		22		pF

h_{FE} Classification

Marking	AC	AD
h_{FE}	82 180	120 240