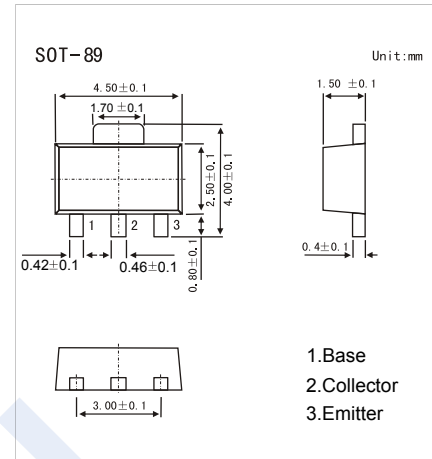


## NPN Transistors

### 2SD1366-HF

#### ■ Features

- Low frequency power amplifier
- Complementary to 2SB1000-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CB0</sub>	25	V
Collector - Emitter Voltage	V <sub>CEO</sub>	20	
Emitter - Base Voltage	V <sub>EB0</sub>	5	
Collector Current - Continuous	I <sub>C</sub>	1	A
Collector Current - Pulse (Note.1)	I <sub>CP</sub>	1.5	
Collector Power Dissipation	P <sub>C</sub>	1	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to 150	

Note.1:PW ≤ 10 ms, Duty cycle ≤ 20%.

#### ■ Electrical Characteristics Ta = 25°C

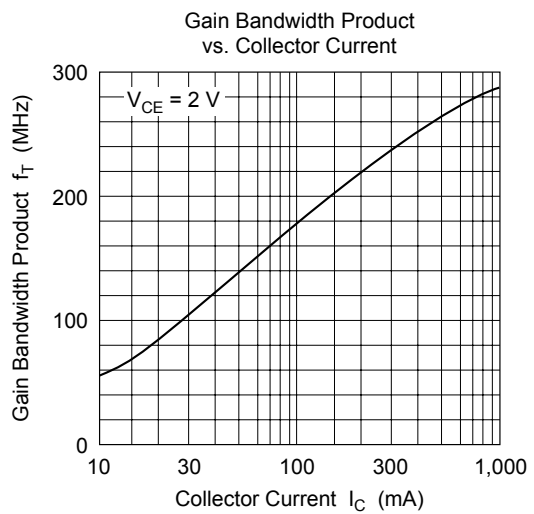
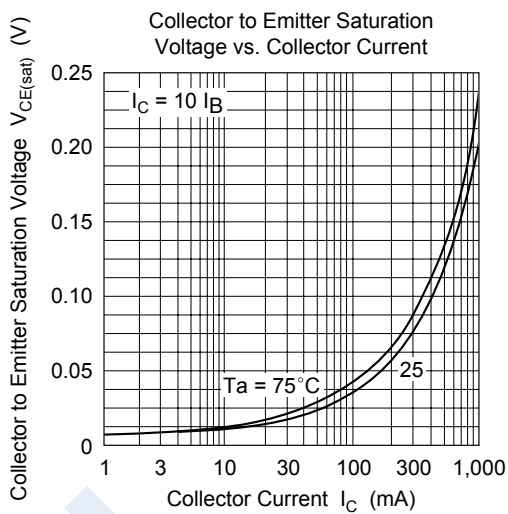
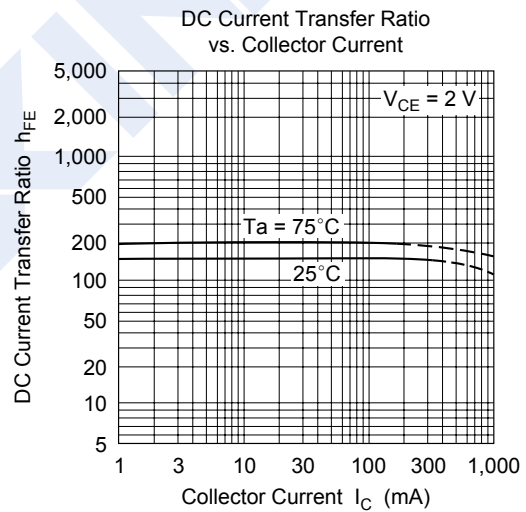
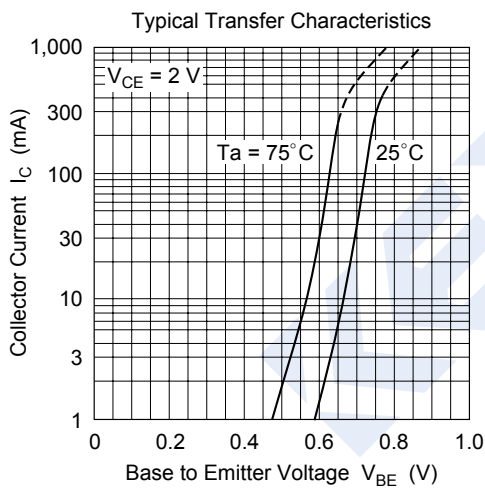
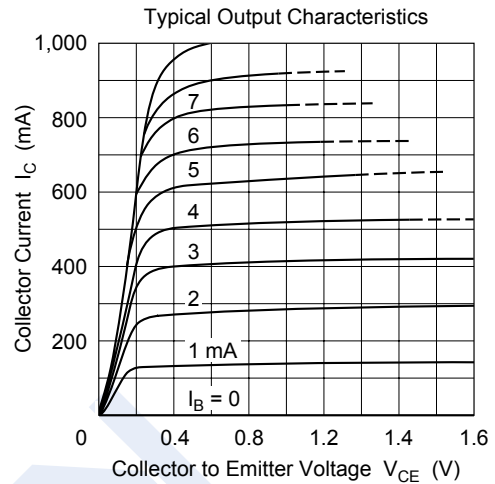
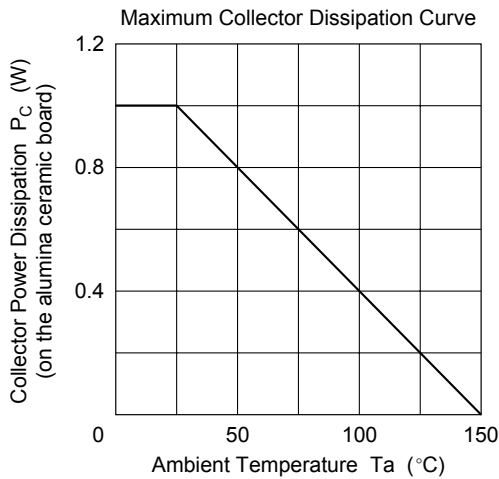
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V <sub>CB0</sub>	I <sub>C</sub> = 100 uA, I <sub>E</sub> = 0	25			V
Collector- emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> = 1 mA, R <sub>BE</sub> =∞	20			
Emitter - base breakdown voltage	V <sub>EB0</sub>	I <sub>E</sub> = 100 uA, I <sub>C</sub> = 0	5			
Collector-base cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> = 20 V, I <sub>E</sub> = 0			0.1	uA
Emitter cut-off current	I <sub>EB0</sub>	V <sub>EB</sub> = 4V, I <sub>C</sub> =0			0.1	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =800 mA, I <sub>B</sub> =80mA		0.15	0.3	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =800 mA, I <sub>B</sub> =80mA		0.9	1	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = 2V, I <sub>C</sub> = 0.5 A	85		240	
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10V, I <sub>E</sub> = 0,f=1MHz		22		pF
Transition frequency	f <sub>t</sub>	V <sub>CE</sub> = 2V, I <sub>C</sub> = 500mA		240		MHz

#### ■ Classification of h<sub>FE</sub>

Type	2SD1366-A-HF	2SD1366-B-HF
Range	85-170	120-240
Marking	AA <sub>F</sub>	AB <sub>F</sub>

## NPN Transistors 2SD1366-HF

■ Typical Characteristics



## NPN Transistors

## 2SD1366-HF

## ■ Typical Characteristics

