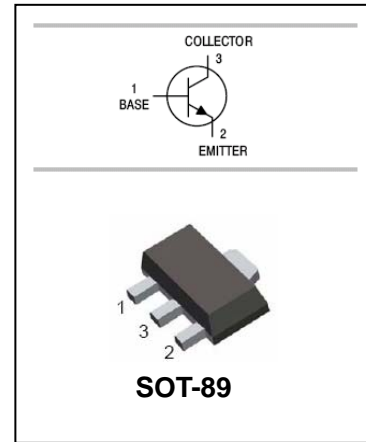


## NPN high-voltage Transistors

## BF620/BF622

### FEATURES

- Low current(max.50mA).
- High voltage(max.300V).
- Viode voltage stages.
- PNPcomplements:BF621 and BF623.



### ORDERING INFORMATION

Type No.	Marking	Package Code
BF620	DC	SOT-89
BF622	DA	SOT-89

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter		Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	BF620	300	V
		BF622	250	
V <sub>CEO</sub>	Collector-Emitter Voltage	BF620	300	V
		BF622	250	
V <sub>EBO</sub>	Emitter-Base Voltage		5	V
I <sub>C</sub>	DC Collector Current		50	mA
I <sub>CM</sub>	Peak Collector Current		100	mA
I <sub>BM</sub>	Peak base current		50	mA
P <sub>tot</sub>	Total power dissipation, T <sub>S</sub> =130°C		0.5	W
T <sub>j</sub> , T <sub>stg</sub>	Junction and Storage Temperature		-65 to +150	°C



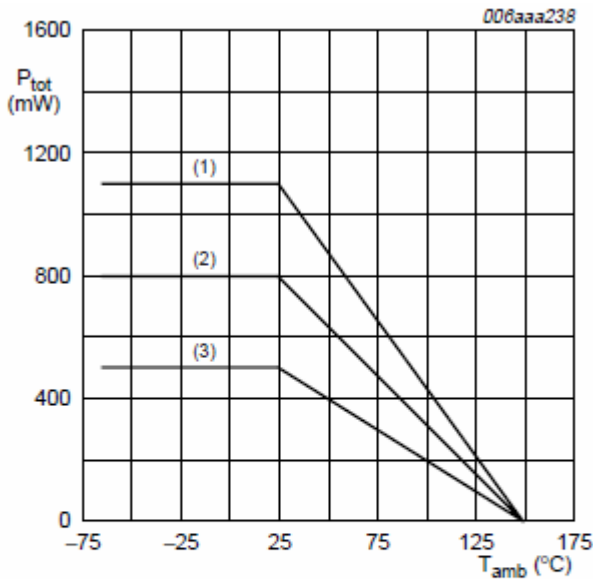
**NPN high-voltage Transistors**

**BF620/BF622**

**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =200V I <sub>E</sub> =0		10	nA
		V <sub>CB</sub> =200V I <sub>E</sub> =0, T <sub>A</sub> =150°C		10	μA
Emitter-base cut-off current	I <sub>EBO</sub>	V <sub>CE</sub> =5V I <sub>C</sub> =0A		50	nA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =20V I <sub>C</sub> =25mA	50		
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =30mA I <sub>B</sub> =5mA		0.6	V
Feedback capacitance	C <sub>re</sub>	I <sub>C</sub> =i <sub>c</sub> =0A, V <sub>CE</sub> =30V f=1MHz		1.6	pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =-10mA, f=100MHz	60		MHz

**TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**



- (1) FR4 PCB; 6 cm<sup>2</sup> mounting pad for collector.
- (2) FR4 PCB; 1 cm<sup>2</sup> mounting pad for collector.
- (3) FR4 PCB; standard footprint.

Power derating curves



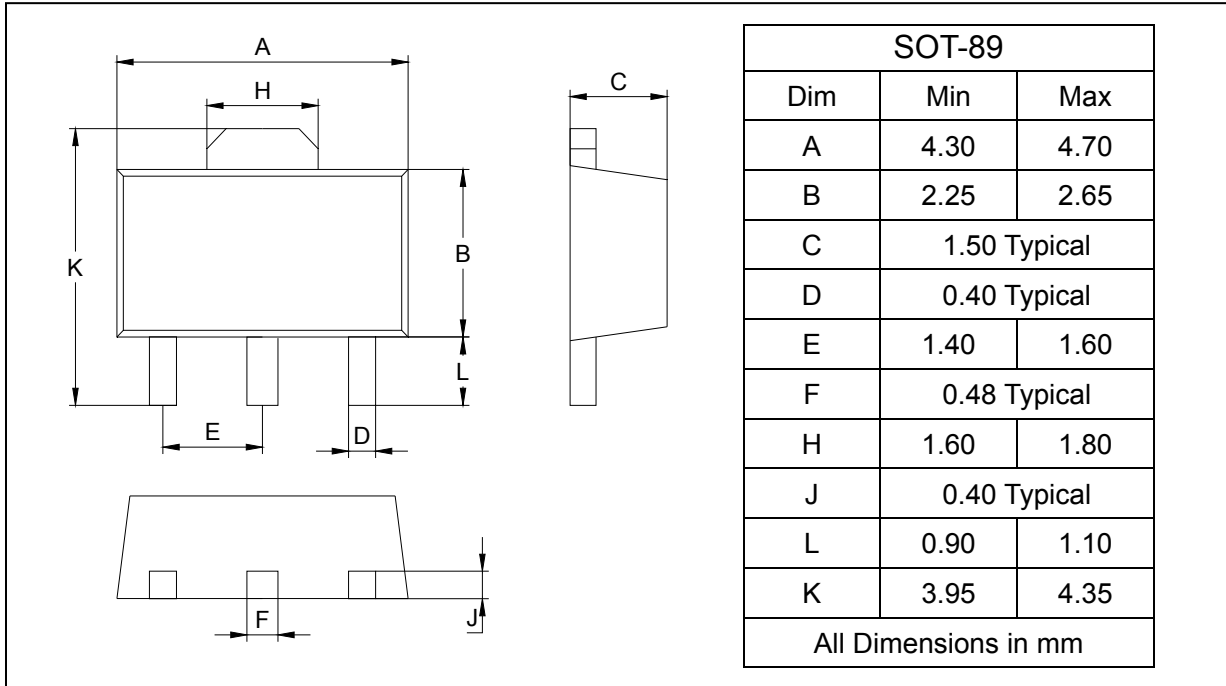
## NPN high-voltage Transistors

## BF620/BF622

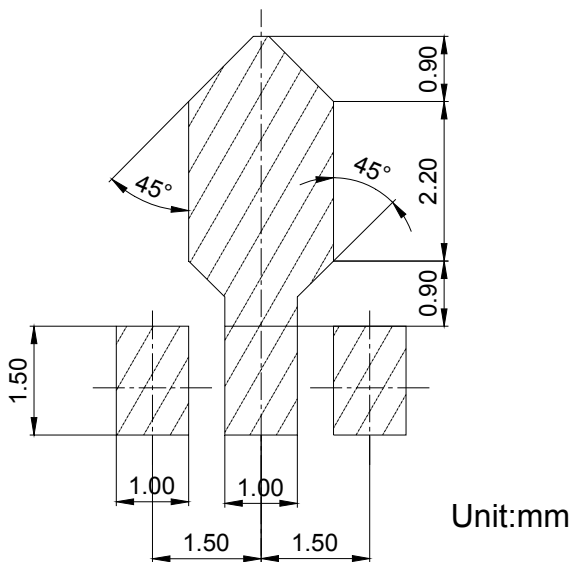
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
BF620/BF622	SOT-89	1000/Tape&Reel