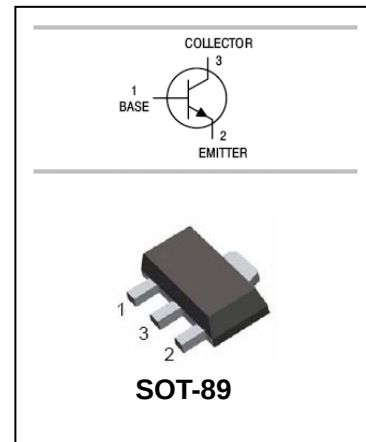


NPN high-voltage Transistors

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_{CBO}	Collector-Base Voltage	BF620 300 BF622 250	V
V_{CEO}	Collector-Emitter Voltage	BF620 300 BF622 250	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	DC Collector Current	50	mA
I_{CM}	Peak Collector Current	100	mA
I_{BM}	Peak base current	50	mA
P_{tot}	Total power dissipation, $T_S=130^{\circ}C$	0.5	W
T_j, T_{stg}	Junction and Storage Temperature	-65 to +150	$^{\circ}C$



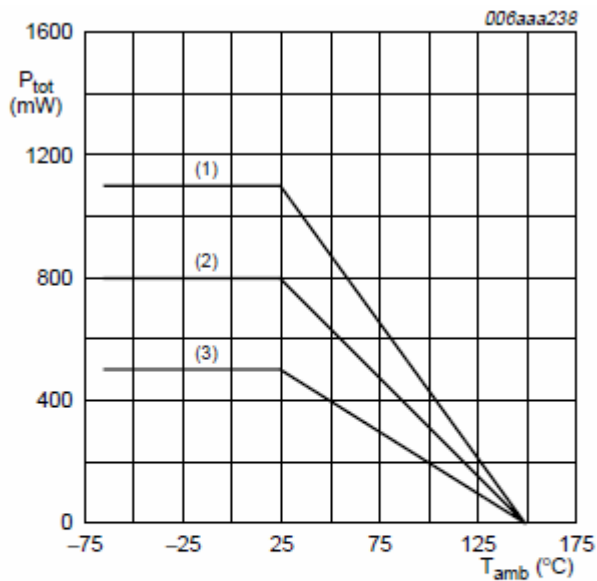
NPN high-voltage Transistors

BF620/BF622

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector cut-off current	I_{CBO}	$V_{CB}=200\text{V } I_E=0$		10	nA
		$V_{CB}=200\text{V } I_E=0, T_A=150^\circ\text{C}$		10	μA
Emitter-base cut-off current	I_{EBO}	$V_{CE}=5\text{V } I_C=0\text{A}$		50	nA
DC current gain	h_{FE}	$V_{CE}=20\text{V } I_C=25\text{mA}$	50		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=30\text{mA } I_B=5\text{mA}$		0.6	V
Feedback capacitance	C_{re}	$I_C=i_c=0\text{A}, V_{CE}=30\text{V}$ $f=1\text{MHz}$		1.6	pF
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C=-10\text{mA},$ $f=100\text{MHz}$	60		MHz

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



- (1) FR4 PCB; 6 cm² mounting pad for collector.
- (2) FR4 PCB; 1 cm² mounting pad for collector.
- (3) FR4 PCB; standard footprint.

Power derating curves

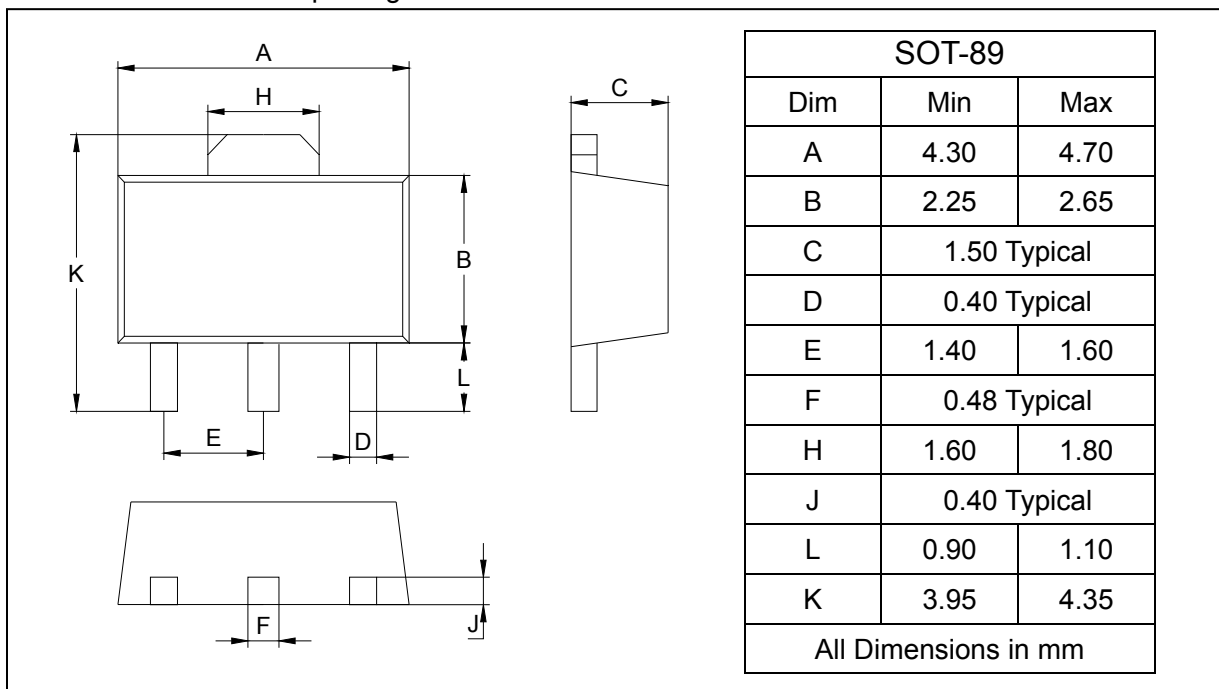
NPN high-voltage Transistors

BF620/BF622

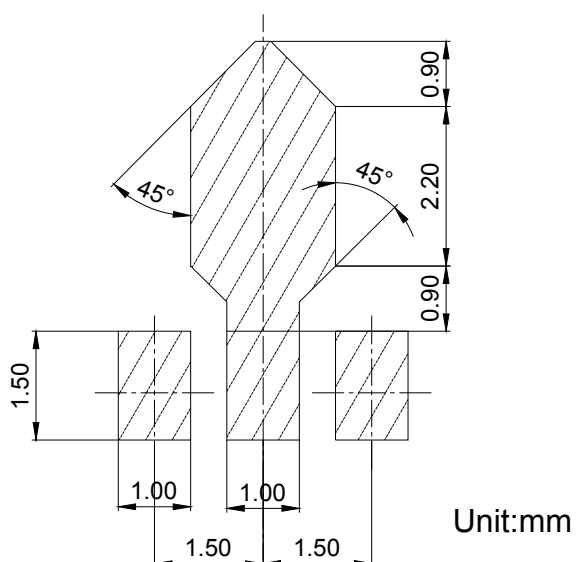
PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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