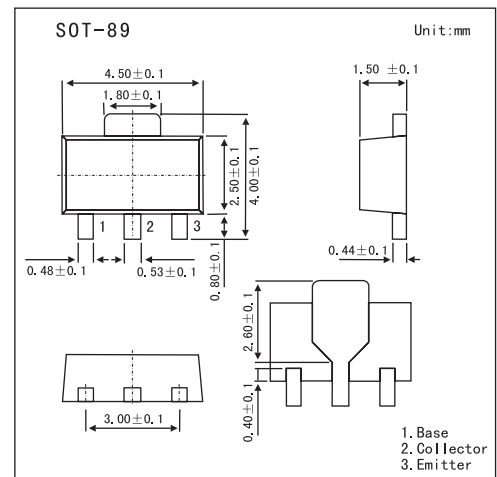


## Silicon NPN epitaxial planer type

## BF620; BF622

## ■ Features

- Low current (max. 50 mA)
- High voltage (max. 300 V).

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit	
collector-base voltage (open emitter)	BF620 BF622	$V_{CB0}$	300 250	V V
collector-emitter voltage (open-base)	BF620 BF622	$V_{CEO}$	300 250	V V
emitter-base voltage (open collector)		$V_{EBO}$	5	V
collector current (DC)		$I_C$	50	mA
peak collector current		$I_{CM}$	100	mA
peak base current		$I_{BM}$	50	mA
total power dissipation $T_{amb} \leq 25^\circ\text{C}^*$		$P_{tot}$	1.25	W
storage temperature		$T_{stg}$	-65 to 150	$^\circ\text{C}$
junction temperature		$T_j$	150	$^\circ\text{C}$
operating ambient temperature		$T_{amb}$	-65 to 150	$^\circ\text{C}$
thermal resistance from junction to ambient *		$R_{th\ j-a}$	100	K/W
thermal resistance from junction to soldering point		$R_{th\ j-s}$	20	K/W

\* Device mounted on a printed-circuit board, single-sided copper, tinplated, mounting pad for collector  $6\text{ cm}^2$ .

**BF620; BF622**■ Electrical Characteristics  $T_a = 25^\circ\text{C}$  unless otherwise specified.

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
collector cut-off current	$V_{(BR)CBO}$	$I_E = 0; V_{CB} = 200\text{ V}$			10	nA
		$I_E = 0; V_{CB} = 200\text{ V}; T_j = 150^\circ\text{C}$			10	mA
emitter cut-off current	$I_{EBO}$	$I_C = 0; V_{EB} = 5\text{ V}$			50	nA
DC current gain	$h_{FE}$	$I_C = 25\text{ mA}; V_{CE} = 20\text{ V}$	50			
collector-emitter saturation voltage	$V_{CEsat}$	$I_C = 30\text{ mA}; I_B = 5\text{ mA}$			600	mV
feedback capacitance	$C_{re}$	$I_C = I_C = 0; V_{CE} = 30\text{ V}; f = 1\text{ MHz}$			1.6	pF
transition frequency	$f_T$	$I_C = 10\text{ mA}; V_{CE} = 10\text{ V}; f = 100\text{ MHz}$	60			MHz

## ■ Marking

Type Number	BF620	BF622
Marking	DC	DA