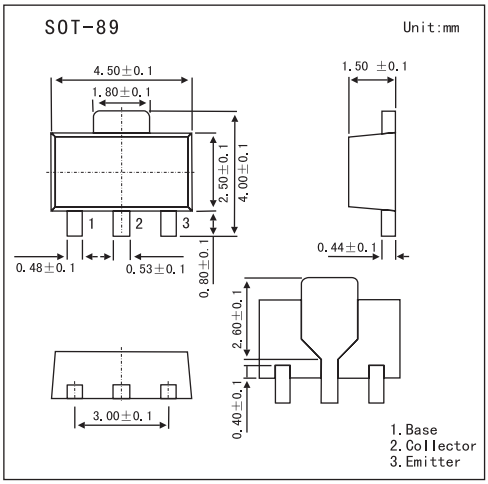
TY Semicondutor®

Product specification

BF620; BF622



■ Features

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

■ Absolute Maximum Ratings Ta = 25℃

Parameter		Symbol	Rating	Unit
collector-base voltage	BF620	V_{CBO}	300	V
(open emitte)	BF622		250	V
collector-emitter voltage	BF620	V_{CEO}	300	V
(open-base)	BF622		250	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 $T_{amb} \leqslant 25$ ℃ *		P_{tot}	1.25	W
storage temperature		T_{stg}	-65 to150	℃
junction temperature		T_j	150	℃
operating ambient temperature		T_{amb}	-65 to150	℃
thermal resistance from junction to ambient *		$R_{th\ j\text{-}a}$	100	K/W
thermal resistance from junction to soldering point		$R_{th\ j\text{-}s}$	20	K/W

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

■ Electrical Characteristics Ta = 25℃ unless otherwise specified.

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

■ Marking

Type Number	BF620	BF622
Marking	DC	DA