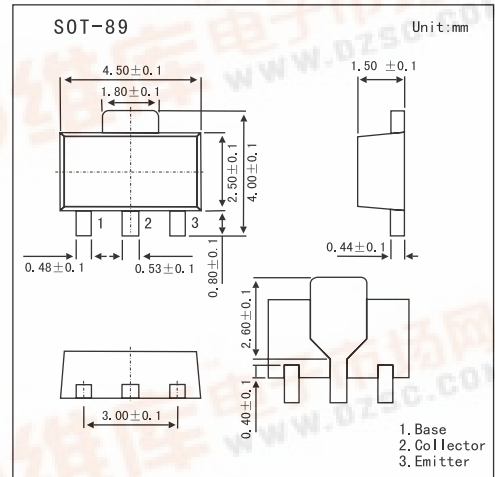


SMD Type Transistors

Silicon NPN epitaxial planer type
BF620; BF622

Features

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



Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
collector-base voltage (open emitter)	BF620 BF622	300 250	V
collector-emitter voltage (open-base)	BF620 BF622	300 250	V
emitter-base voltage (open collector)	VEBO	5	V
collector current (DC)	IC	50	mA
peak collector current	ICM	100	mA
peak base current	IBM	50	mA
total power dissipation Tamb ≤ 25 °C *	Ptot	1.25	W
storage temperature	Tstg	-65 to 150	°C
junction temperature	Tj	150	°C
operating ambient temperature	Tamb	-65 to 150	°C
thermal resistance from junction to ambient *	Rth j-a	100	K/W
thermal resistance from junction to soldering point	Rth j-s	20	K/W

* Device mounted on a printed-circuit board, single-sided copper, tinplated, mounting pad for collector 6 cm².

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