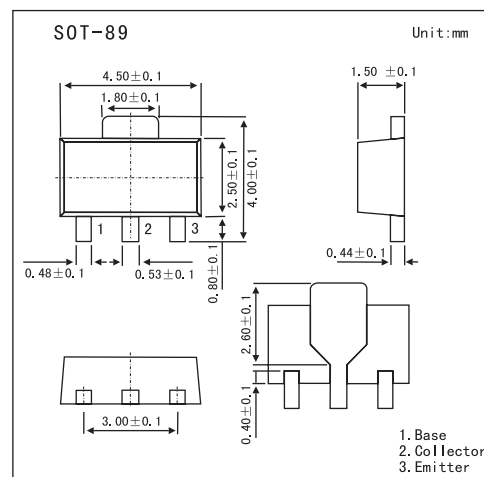


Silicon NPN epitaxial planer type

2SD968, 2SD968A

■ Features

- High collector to emitter voltage V_{CEO} .
- Large collector power dissipation P_C .

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	100	V
		120	V
Collector to emitter voltage	V_{CEO}	100	V
		120	V
Emitter to base voltage	V_{EBO}	5	V
Peak collector current	I_{CP}	1	A
Collector current	I_C	0.5	A
Collector power dissipation	P_C *	1	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to 150	$^\circ\text{C}$

* Printed circuit board: Copper foil area of 1cm^2 or more, and the board thickness of 1.7mm for the collector portion

2SD968, 2SD968A

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector to emitter voltage 2SD968	V _{CEO}	I _C = 100μA, I _B = 0	100			V
2SD968A	V _{CEO}	I _C = 100μA, I _B = 0	120			V
Emitter to base voltage	V _{EB0}	I _E = 10μA, I _C = 0	5			V
Forward current transfer ratio	h _{FE}	V _{CE} = 10V, I _C = 150mA*	90		220	
		V _{CE} = 5V, I _C = 500mA*	50	100		
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 500mA, I _B = 50mA*		0.2	0.6	V
Base to emitter saturation voltage	V _{BE(sat)}	I _C = 500mA, I _B = 50mA*		0.85	1.2	V
Transition frequency	f _T	V _{CB} = 10V, I _E = -50mA, f = 200MHz		120		MHz
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f = 1MHz		11	20	pF

* Pulse measurement

■ hFE Classification

Marking Symbol	2SD968	WQ	WR
	2SD968A	VQ	VR
Rank		Q	R
hFE		90~155	130~220