

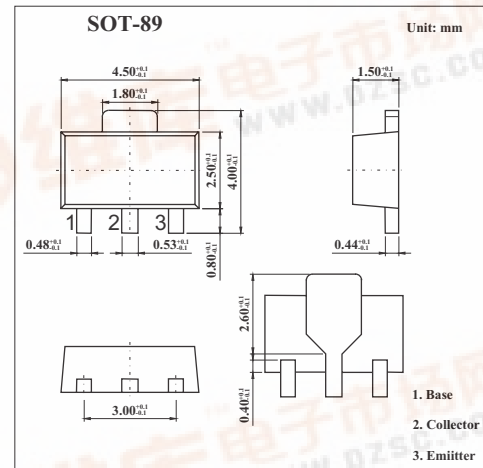
SMD Type Transistors

Low VCE(sat) Transistor

2SD2098

Features

- Low VCE(sat).
- Excellent DC current gain characteristics.
- NPN silicon transistor.



Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CB0</sub>	50	V
Collector-emitter voltage	V <sub>CEO</sub>	20	V
Emitter-base voltage	V <sub>EB0</sub>	6	V
Collector current	I <sub>C</sub>	5	A
Collector power dissipation	P <sub>C</sub>	0.5	W
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	BV <sub>CB0</sub>	I <sub>C</sub> =50μA	50			V
Collector-emitter breakdown voltage	BV <sub>CEO</sub>	I <sub>C</sub> =1mA	20			V
Emitter-base breakdown voltage	BV <sub>EB0</sub>	I <sub>E</sub> =50μA	6			V
Collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> =40V			0.5	μA
Emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> =5V			0.5	μA
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =4 A, I <sub>B</sub> =0.1A		0.3	1.0	V
DC current transfer ratio	h <sub>FE</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =0.5A	120		390	
Output capacitance	f <sub>T</sub>	V <sub>CE</sub> =6V, I <sub>E</sub> = -50mA, f=100MHz		150		MHz
Transition frequency	C <sub>ob</sub>	V <sub>CB</sub> =20V, I <sub>E</sub> =0A, f=1MHz		30		pF

hFE Classification

Marking	DJ	
	Q	R
hFE	120~270	180~390

