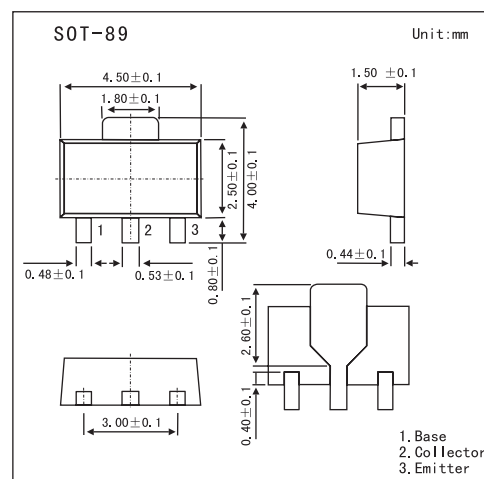


Silicon NPN Epitaxial Planar Type

2SD2357

■ Features

- Low collector-emitter saturation voltage $V_{CE(sat)}$.
- Large collector power dissipation P_C .
- Mini Power type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	10	V
Collector-emitter voltage	V_{CEO}	10	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	1.2	A
Peak collector current	I_{CP}	1	A
Collector power dissipation	P_C	1	W
Junction temperature	T_J	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base cutoff current	I_{CBO}	$V_{CB} = 7\text{ V}, I_E = 0$			1	μA
Collector-base voltage	V_{CBO}	$I_C = 10\text{ }\mu\text{A}, I_E = 0$	10			V
Collector-emitter voltage	V_{CEO}	$I_C = 1\text{ mA}, I_B = 0$	10			V
Emitter-base voltage	V_{EBO}	$I_E = 10\text{ }\mu\text{A}, I_C = 0$	5			V
Forward current transfer ratio	h_{FE}	$V_{CE} = 2\text{ V}, I_C = 100\text{ mA}$	200		800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500\text{ mA}, I_B = 5\text{ mA}$			0.15	V
Transition frequency	f_T	$V_{CB} = 5\text{ V}, I_E = -50\text{ mA}, f = 200\text{ MHz}$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB} = 5\text{ V}, I_E = 0, f = 1\text{ MHz}$		30		pF

■ Marking

Marking	1M
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