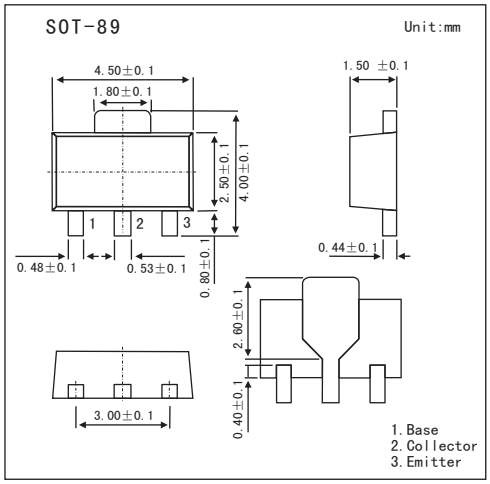
NPN Silicon Epitaxial Transistors

2SD965-Q



■ Features

- Low collector-emitter saturation voltage $V_{CE(sat)}$
- Satisfactory operation performances at high efficiency with the low-voltage power supply.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	40	V
Collector-emitter voltage	V_{CEO}	20	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	5	A
Collector power dissipation	P_C	0.5	W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA, I_E=0	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= 1mA. I_B=0	20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 10μA, I_C=0	7			V
Collector Cut-off Current	I_{CBO}	V_{CB}=10V, I_E=0			0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB} = 7V, I_C = 0			0.1	μA
DC current gain	h_{FE}	V_{CE} = 2 V, I_C = 0.5 A	230		380	
		V_{CE} = 2 V, I_C = 2A	150			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 2A, I_B = 0.1 A			1	V
Collector output capacitance	C_{ob}	V_{CB} = 20 V, I_E = 0, f = 1 MHz			50	pF
Transition frequency	f_T	V_{CB} = 6 V, I_C = 50mA		150		MHz

■ Marking

Marking	D965Q

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■ Electrical Characteristics Curves