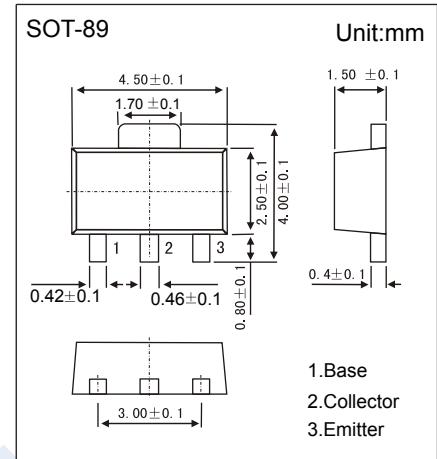


NPN Transistors

2SD2441

■ Features

- Collector Current Capability $I_C=1.5A$
- Collector Emitter Voltage $V_{CE0}=10V$

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	10	V
Collector - Emitter Voltage	V_{CE0}	10	
Emitter - Base Voltage	V_{EB0}	7	
Collector Current - Continuous	I_C	1.5	A
Collector Current - Pulse	I_{CP}	2	
Collector Power Dissipation	P_C	1	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 to 150	

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = 100 \mu A, I_E = 0$	10			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = 1 mA, I_B = 0$	10			
Emitter - base breakdown voltage	V_{EB0}	$I_E = 100 \mu A, I_C = 0$	7			
Collector-base cut-off current	I_{CB0}	$V_{CB} = 7 V, I_E = 0$			1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = 5 V, I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1 A, I_B = 25 mA$			0.25	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 1 A, I_B = 25 mA$			1.2	
DC current gain	h_{FE}	$V_{CE} = 1 V, I_C = 400 mA$	200		700	
Forward voltage (Note.1)	V_F	$I_F = 500 mA$			1.3	V
Collector output capacitance	C_{ob}	$V_{CB} = 10 V, I_E = 0, f = 1 MHz$		50		pF
Transition frequency	f_T	$V_{CB} = 60 V, I_E = -50 mA, f = 200 MHz$		190		MHz

Note.1 : Applicable to the built-in diode.

■ Marking

Marking	1V
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Typical Characteristics

