PRODUCT DATA SHEET

To learn more about JGSEMI, please visit our website at

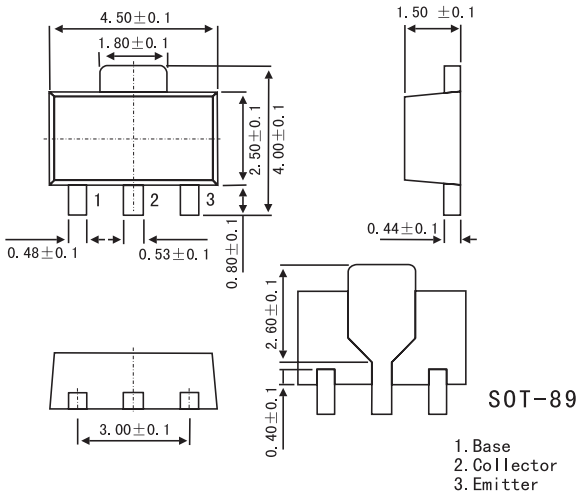
Datasheet Resources Samples

Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

PBSS5540X

PNP Silicon Power Transistor

Unit:mm



Features

- Low saturation voltage.

  $V_{CE(sat)} \leq -0.5$(@ I_C=-2A,I_B=-0.2A)

- Excellent h_{FE}

  h_{FE}: 60 to 400 (@V_{CE}=-2V,I_C=-1A)

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	-40	V
Collector to emitter voltage	V_{CEO}	-30	V
Emitter to base voltage	V_{EBO}	-5	V
Collector current	I_C	-3	A
Collector Power dissipation T_A = 25℃	P_C	1.0	W
T_C = 25℃		10	W
Junction temperature	T_j	150	℃
Storage temperature range	T_{stg}	-55 to +150	℃

* PW≤350μs,duty cycle≤2%.

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	I_C=-100μA,I_E=0	-40			V
Collector-emitter breakdown voltage	V_{CEO}	I_C= -10 mA , I_B=0	-30			V
Emitter-base breakdown voltage	V_{EBO}	I_E= -100μA, I_C=0	-5			V
Collector cutoff current	I_{CBO}	V_{CB} = -30 V, I_E = 0			-1.0	μA
Emitter cutoff current	I_{EBO}	V_{EB} = -6V, I_C = 0			-1.0	μA
DC current gain *	h_{FE}	V_{CE} = -2.0 V, I_C = -1.0A *	60	160	400	
Collector saturation voltage *	$V_{CE(sat)}$	I_C = -2A, I_B = -0.2A		-0.3	-0.5	V
Base saturation voltage *	$V_{BE(sat)}$	I_C = -2A, I_B = -0.2A		-1.0	-2.0	V
Output capacitance	C_{ob}	V_{CB} = -10 V, I_E = 0,f=1.0MHz		55		pF
Transition frequency	f_T	V_{CE} = -5.0 V, I_E = -0.1A,f=10MHz		80		MHz

* Pulsed: PW ≤ 350 μs, duty cycle ≤ 2%

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