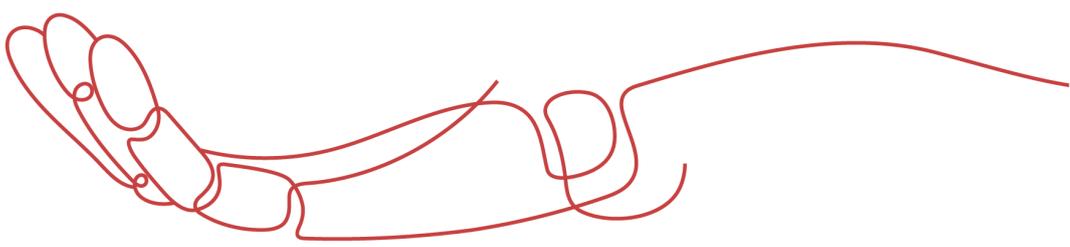


PRODUCT DATA SHEET



To learn more about JGSEMI, please visit our website at



Datasheet



Resources

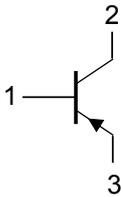


Samples

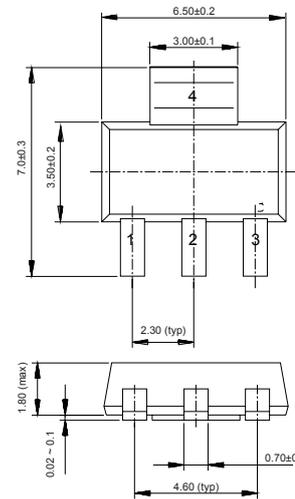
Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

■ Features

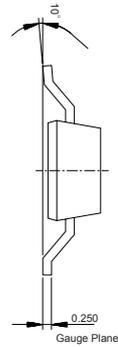
- High current (max. 1 A)
- Low voltage (max. 20 V)



SOT-223



Unit:mm



- 1.Base
- 2.Collector
- 3.Emitter
- 4.Collector

■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	-32	V
Collector - Emitter Voltage	V _{CEO}	-20	
Emitter - Base Voltage	V _{EBO}	-5	
Collector Current - Continuous	I _C	-1	A
Collector Current - Pulse	I _{CP}	-2	
Base Current - Pulse	I _{BP}	-0.2	
Collector Power Dissipation	P _C	1.35	W
Thermal Resistance from Junction to Ambient	R _{θJA}	91	°C/W
Thermal Resistance from Junction to Soldering Point	R _{θJS}	10	
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-65 to 150	

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _C = -100 μA, I _E =0	-32			V
Collector- emitter breakdown voltage	V _{CE0}	I _C = -1 mA, I _B =0	-20			
Emitter - base breakdown voltage	V _{EB0}	I _E = -100 μA, I _C =0	-5			
Collector-base cut-off current	I _{CBO}	V _{CB} = -25 V, I _E =0			-100	nA
		V _{CB} = -25 V, I _E =0, T _J =150°C			-10	μA
Emitter cut-off current	I _{EB0}	V _{EB} = -5V, I _C =0			-100	nA
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-1 A, I _B =-100mA			-0.5	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =-1 A, I _B =-100mA			-1.2	
Base - emitter voltage	V _{BE}	V _{CE} = -10V, I _C =- 5mA		-0.62		
		V _{CE} = -1V, I _C = -1 A			-1	
DC current gain	h _{FE}	V _{CE} = -10V, I _C = -5mA	50			
		V _{CE} = -1V, I _C = -500mA	85		375	
		V _{CE} = -1V, I _C =- 1 A	60			
Collector capacitance	C _{ob}	V _{CB} = -5V, I _E = I _C =0, f=1MHz		48		pF
Transition frequency	f _T	V _{CE} = -5V, I _C = -10mA, f=100MHz	40			MHz

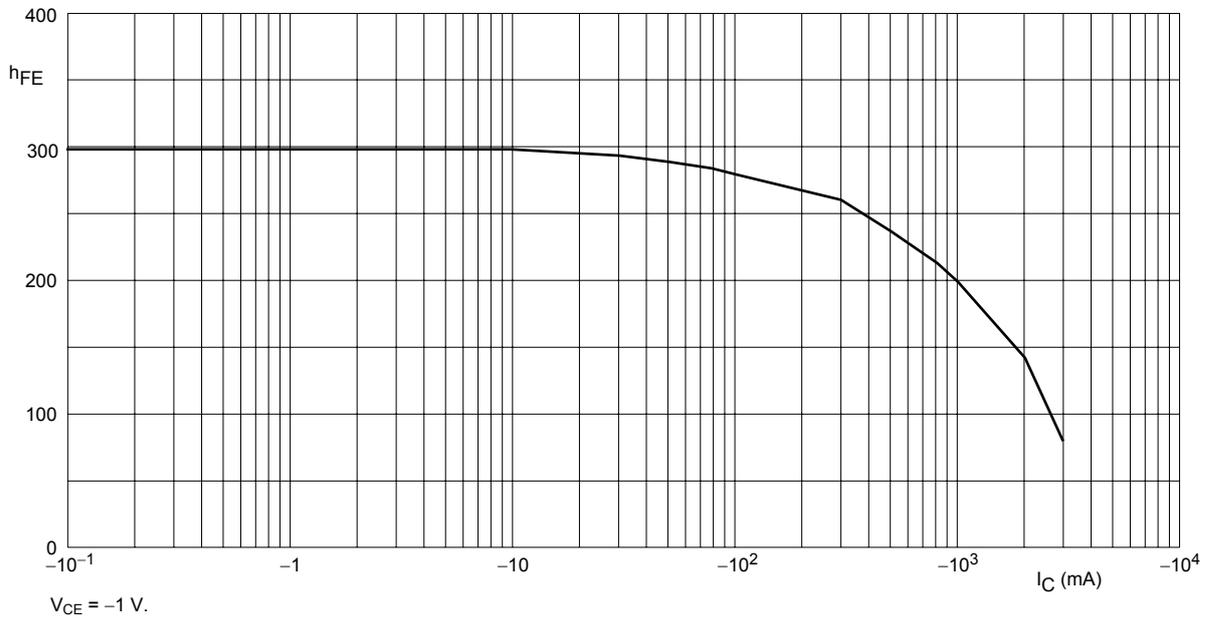
■ Typical Characteristics


Fig.1 DC current gain; typical values.

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