



PRODUCT DATA SHEET

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Datasheet



Resources

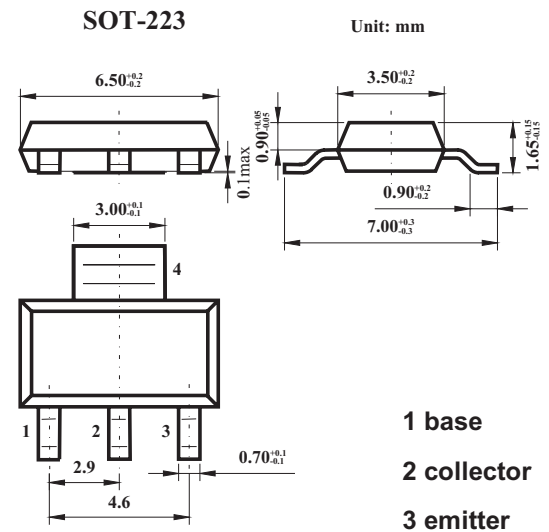


Samples

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

- 60 Volt V_{CE0} .
- 3 Amp continuous current.
- Low saturation voltage.



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	80	V
Collector-emitter voltage	V_{CEO}	60	V
Emitter-base voltage	V_{EBO}	5	V
Peak pulse current	I_c	3	A
Continuous collector current	I_{CM}	6	A
Power dissipation	P_{tot}	2	W
Operating and storage temperature range	T_j, T_{stg}	-55 to +125	$^{\circ}\text{C}$

Electrical Characteristics Ta = 25

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC=100μA	80			V
Collector-emitter breakdown voltage *	V(BR)CEO	IC=10mA	60			V
Emitter-base breakdown voltage	V(BR)EBO	IE=100μA	5			V
Collector Cut-Off Current	ICBO	VCB=60V VCB=60V, Ta = 100℃			0.1 10	μA
Emitter Cut-Off Current	IEBO	VEB=4V			0.1	μA
Collector-emitter saturation voltage *	VCE(sat)	IC=1A, IB=100mA IC=3A, IB=300mA		0.12 0.43	0.3 0.6	V
Base-emitter saturation voltage *	VBE(sat)	IC=1A, IB=100mA		0.9	1.25	V
Base-Emitter Turn-On Voltage *	VBE(on)	IC=1A, VCE=2V		0.8	1	V
Static Forward Current Transfer Ratio	hFE	IC=50mA, VCE =2V*	70	200		
		IC=500mA, VCE =2V*	100	200	300	
		IC=1A, VCE =2V*	80	170		
		IC=2A, VCE =2V*	40	80		
Transitional frequency	fT	IC=100mA, VCE=5V f=100MHz	140	175		MHz
Output capacitance	Cobo	VCB=10V, f=1MHz			30	pF
Switching times	ton	IC=500mA, VCC=10V, IB1=IB2=50mA		45		ns
	toff			800		ns

* Pulse test: tp = 300 μs; d ≤ 0.02.

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