



PRODUCT DATA SHEET



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Datasheet



Resources



Samples

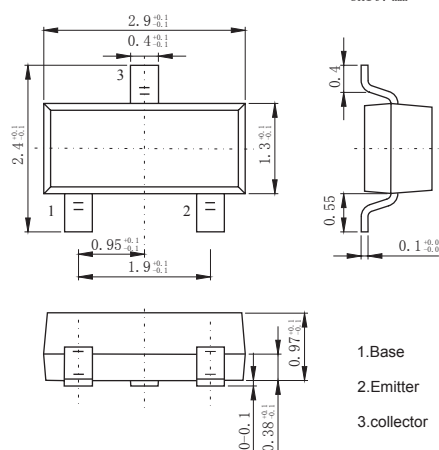
Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

■ Features

- Collector Current Capability $I_C = -1A$
- Collector Emitter Voltage $V_{CEO} = -100V$

SOT-23

Unit: mm



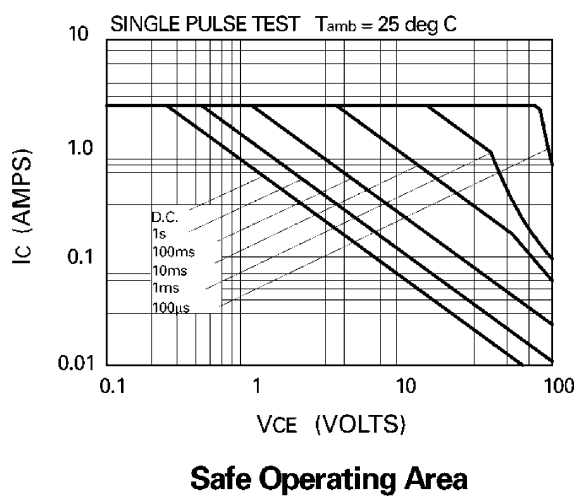
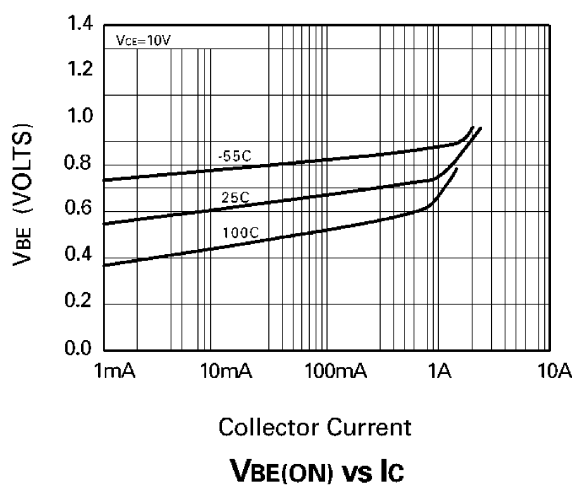
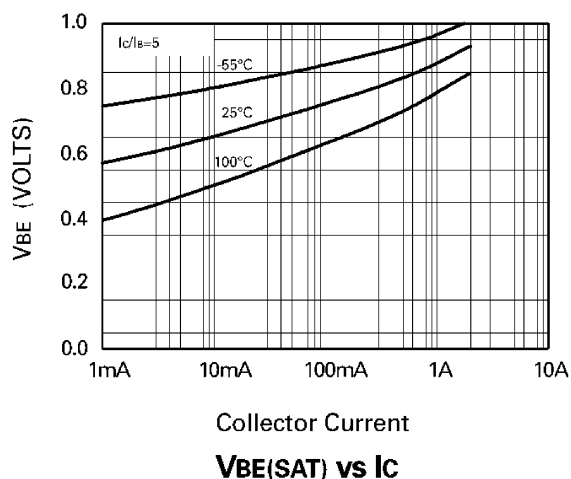
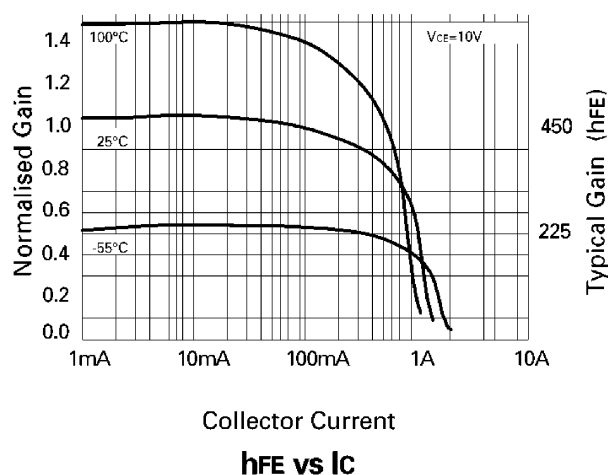
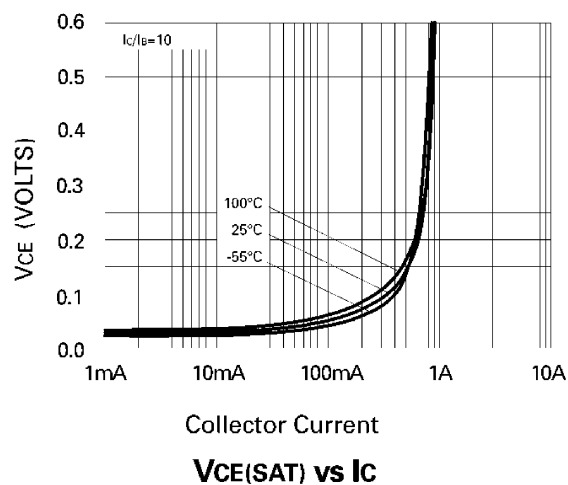
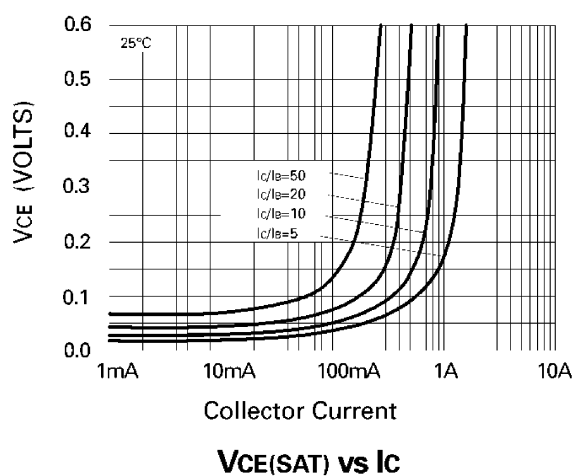
■ Absolute Maximum Ratings $T_a = 25^{\circ}C$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-100	V
Collector - Emitter Voltage	V_{CEO}	-100	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-1	A
Collector Current - Pulse	I_{CP}	-2.5	
Base Current	I_B	-0.5	
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature range	T_{stg}	-55 to 150	

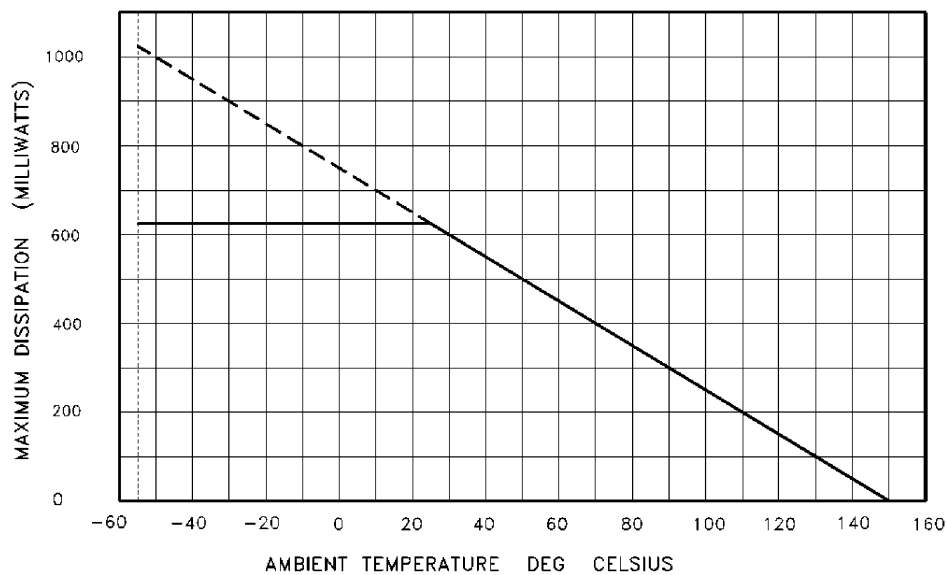
■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _c = -100 μA, I _E =0	-100			V
Collector- emitter breakdown voltage	V _{CEO}	I _c = -10 mA, I _B =0	-100			
Emitter - base breakdown voltage	V _{EB0}	I _E = -100 μA, I _C =0	-5			
Collector-base cut-off current	I _{CBO}	V _{CB} = -80 V, I _E =0			-100	nA
Collector- emittercut-off current	I _{CES}	V _{CE} = -80 V, I _E =0			-100	
Emitter cut-off current	I _{EBO}	V _{EB} = -4V, I _C =0			-100	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =-100 mA, I _B =-10mA			-80	mV
		I _c =-500 mA, I _B =-50mA			-200	
		I _c =-1 A, I _B =-150mA			-330	
Base - emitter saturation voltage	V _{BE(sat)}	I _C =-1 A, I _B =-150mA			-1	V
Base - emitter turn-on voltage	V _{BE(on)}	V _{CE} = -10V, I _c = -1A			-1	
DC current gain	h _{FE}	V _{CE} = -10V, I _c = -10mA	300			
		V _{CE} = -1V, I _c = -100mA	300			
		V _{CE} = -10V, I _c = -0.5A	250			
		V _{CE} = -10V, I _c = -1A		250		
		V _{CE} = -10V, I _c = -1.5A		30		
Turn-on time	t _{on}	V _{CC} =-50V, I _C =-0.5A I _{B1} =-I _{B2} =50mA		50		ns
Turn-off time	t _{off}			760		
Collector output capacitance	C _{ob}	V _{CB} = -10V, f=1MHz			20	pF
Transition frequency	f _T	V _{CE} = -10V, I _c = -50mA,f=100MHz	150			MHz

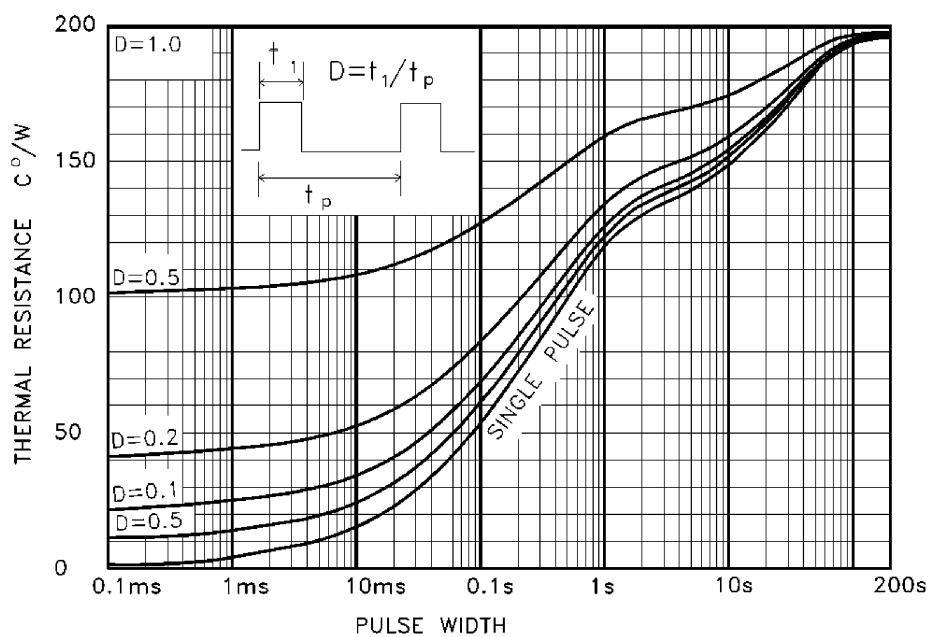
■ Typical Characteristics



■ Typical Characteristics



DERATING CURVE



MAXIMUM TRANSIENT THERMAL RESISTANCE

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