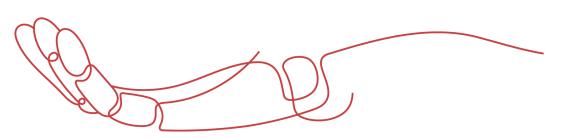




# **PRODUCT DATA SHEET**



To learn more about JGSEMI, please visit our website at







Datasheet

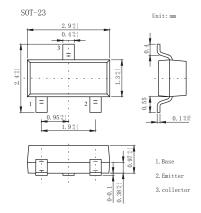
Samples

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.

**NPN Transistors** 

## ■ Features

- High Collector-Emitter Voltage
- Complement to MMBTA94



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit	
Collector - Base Voltage	Vсво	500	V	
Collector - Emitter Voltage	VCEO	500		
Emitter - Base Voltage	VEBO	6		
Collector Current - Continuous	Ic	200	mA	
Collector Current -Pulsed	Ісм	300		
Collector Power Dissipation	Pc	350	mW	
Thermal Resistance From Junction To Ambient	Rеја	357	°C/W	
Junction Temperature	TJ	150	°C	
Storage Temperature Range	Tstg	-55 to 150		

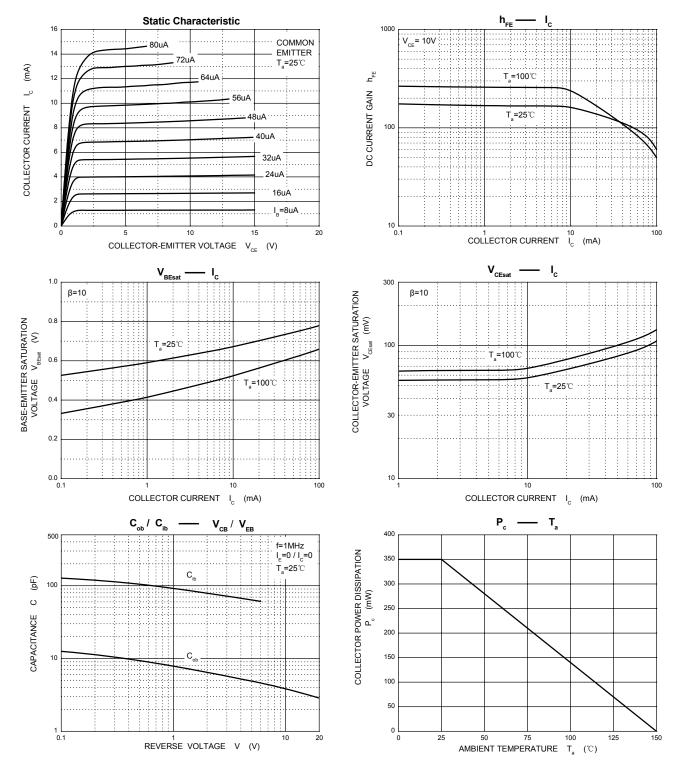
#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
Collector- base breakdown voltage	Vсво	Ic= 100 μA, IE= 0	500			
Collector- emitter breakdown voltage *1	VCEO	Ic= 1 mA, IB= 0	500			V
Emitter - base breakdown voltage	VEBO	IE= 100 μ A, IC= 0	6			
Collector-base cut-off current	Ісво	Vcb= 500 V , IE= 0			100	nA
Emitter cut-off current	ІЕВО	VEB= 4V , IC=0			100	
Collector-emitter saturation voltage *1	VCE(sat)1	Ic=10 mA, IB=1mA			0.2	
	VCE(sat)2	Ic=50 mA, Iв=5mA			0.3	V
Base - emitter saturation voltage *1	VBE(sat)	Ic=10 mA, IB=1mA			0.75	
DC current gain *1	hFE(1)	VCE= 10V, IC= 1mA	50			
	hFE(2)	VCE= 10V, IC= 10mA	80		300	
	hFE(3)	VCE= 10V, IC= 50mA	40			
	hFE(4)	VcE= 10V, Ic= 100mA	40			
Collector output capacitance	Cob	VCB= 20V, IE= 0,f=1MHz			7	pF
Transition frequency	f⊤	VCE=20, Ic= 10mA,f=30MHz	50			MHz

<sup>\*1:</sup> Pulse test: pulse width  ${\leqslant}300\mu\text{s},$  duty cycle  ${\leqslant}$  2.0%.



# ■ Typical Characterisitics





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