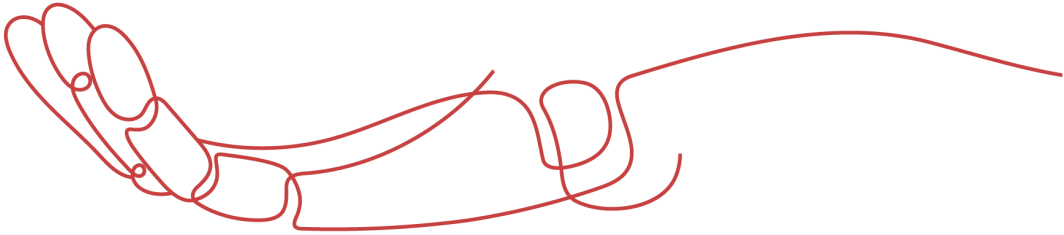




PRODUCT DATA SHEET



To learn more about JGSEMI, please visit our website at



Datasheet



Resources

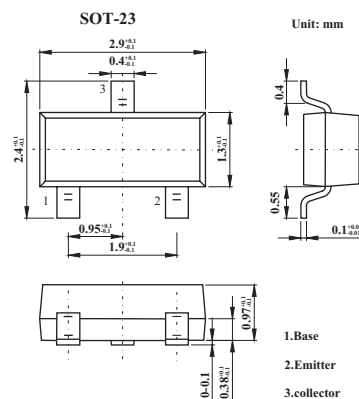


Samples

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

- Low current (max. 25 mA).
- Low voltage (max. 40 V).



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	40	V
Collector-emitter voltage	V _{CE0}	40	V
Emitter-base voltage	V _{EB0}	4	V
Collector current	I _c	25	mA
Peak collector current	I _{CM}	25	mA
Total power dissipation *	P _{tot}	250	mW
Storage temperature	T _{stg}	-65 to +150	°C
Junction temperature	T _j	150	°C
Operating ambient temperature	R _{amb}	-65 to +150	°C
Thermal resistance from junction to ambient *	R _{th j-a}	500	K/W

* Transistor mounted on an FR4 printed-circuit board.

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I _{CBO}	I _E = 0; V _{CB} = 20 V			100	nA
Emitter cutoff current	I _{EBO}	I _C = 0; V _{EB} = 4 V			100	nA
DC current gain	h _{FE}	I _C = 1 mA; V _{CE} = 10 V	67		222	
Base to emitter voltage	V _{BE}	I _C = 1 mA; V _{CE} = 10 V	675	725	775	mV
Feedback capacitance	C _{re}	I _C = 0; V _{CB} = 10 V; f = 1 MHz		0.3		pF
Transition frequency	f _T	I _C = 1 mA; V _{CE} = 10 V; f = 100 MHz		380		MHz

Attention

1, Any and all JGSEMI products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical or material damage. Consult with your JGSEMI representative nearest you before using any JGSEMI products described or contained herein in such applications.

2, JGSEMI assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all JGSEMI products described or contained herein.

3, Specifications of any and all JGSEMI products described or contained herein stipulate the performance, characteristics, and functions of the described products in the independent state, and are not guarantees of the performance, characteristics, and functions of the described products as mounted in the customer's products or equipment. To verify symptoms and states that cannot be evaluated in an independent device, the customer should always evaluate and test devices mounted in the customer's products or equipment.

4, In the event that any or all JGSEMI products (including technical data, services) described or contained herein are controlled under any of applicable local export control laws and regulations, such products must not be exported without obtaining the export license from the authorities concerned in accordance with the above law.

5, No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or any information storage or retrieval system, or otherwise, without the prior written permission of JGSEMI Semiconductor CO., LTD.

6, Any and all information described or contained herein are subject to change without notice due to product technology improvement, etc. When designing equipment, refer to the "Delivery Specification" for the JGSEMI product that you intend to use.