

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

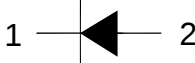
BAS521WT-MS

Product specification

Applications

- high speed switching
- high voltage switching

Reference News

SOD-523	PIN Configuration	Marking
		

PINNING

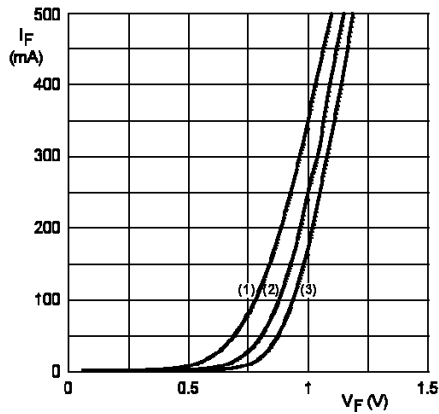
PIN	DESCRIPTION
1	Cathode
2	Anode

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	300	V
Reverse Voltage	V_R	300	V
Continuous Forward Current	I_F	225	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-Repetitive Peak Forward Current (1 μs)	I_{FSM}	4	A
Power Dissipation	P_{tot}	250	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^{\circ}\text{C}$

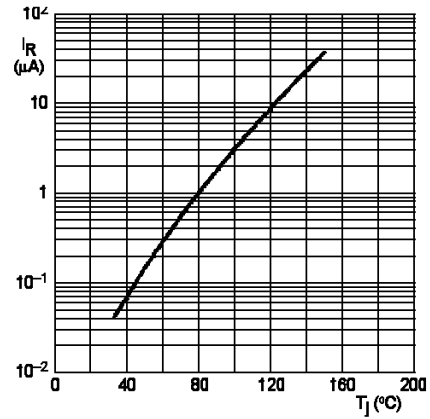
Characteristics at $T_a = 25^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	V_F	-	1.1	V
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	300	-	V
Reverse Current at $V_R = 250\text{ V}$	I_R	-	150	nA
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}$, $R_L = 100\text{ }\Omega$, $i_{tr} = 0.1\text{ }I_R$	t_{rr}	-	50	ns
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	5	pF



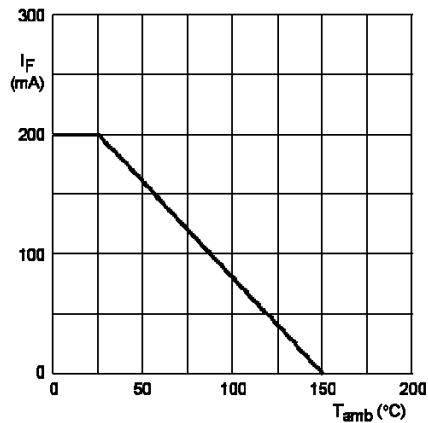
- (1) $T_{amb} = 150^\circ\text{C}$.
(2) $T_{amb} = 75^\circ\text{C}$.
(3) $T_{amb} = 25^\circ\text{C}$.

Forward current as a function of forward voltage; typical values.

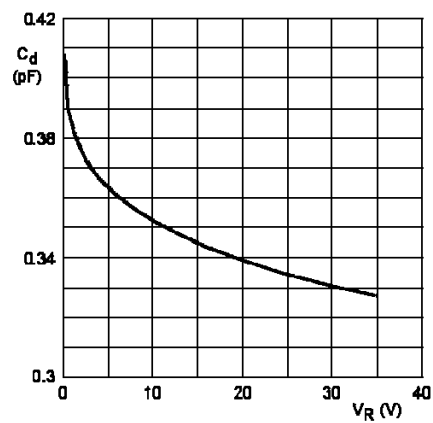


$V_R = V_{Rmax}$; typical values.

Reverse current as a function of junction temperature.

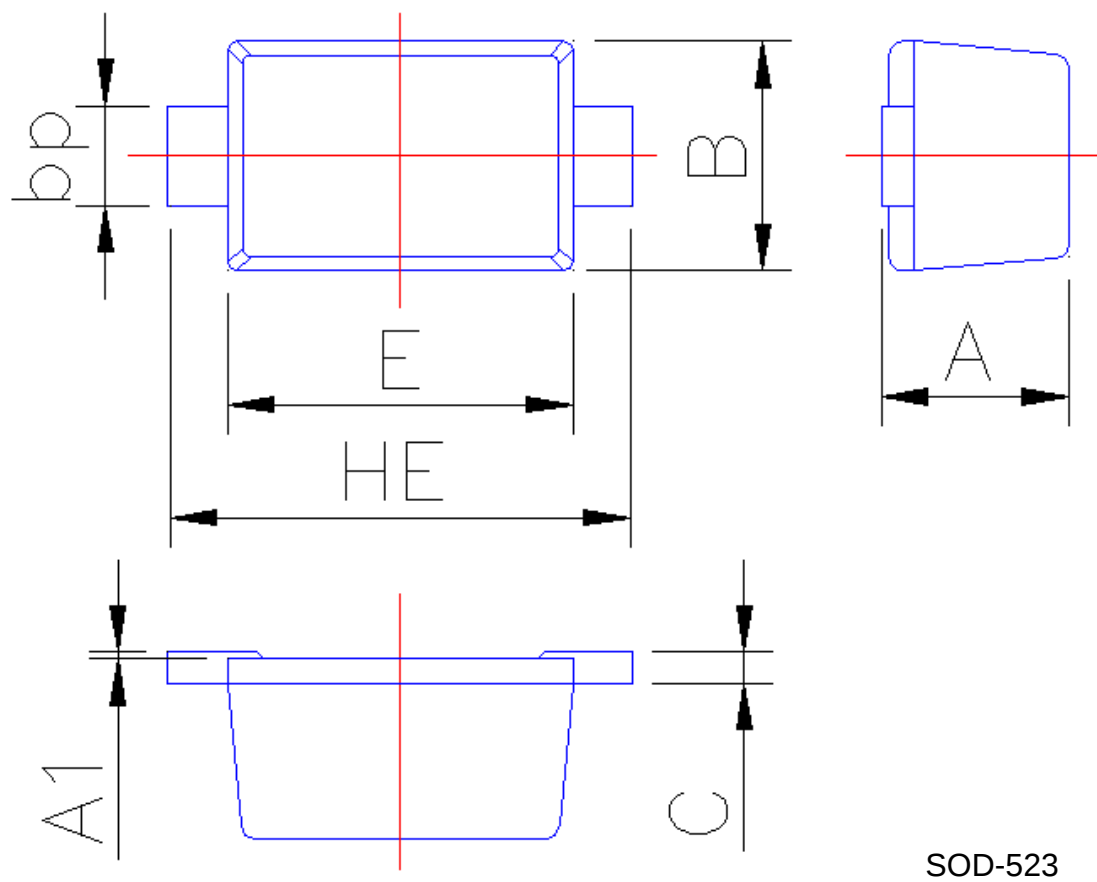


Maximum permissible continuous forward current as a function of ambient temperature.



Diode capacitance as a function of reverse voltage; typical values.

PACKAGE MECHANICAL DATA



SOD-523

Symbol	Dimension in Millimeters	
	Min	Max
A	0.60	0.75
A1	0	0.05
B	0.75	0.85
bp	0.25	0.40
C	0.09	0.15
E	1.15	1.25
HE	1.50	1.70

REEL SPECIFICATION

P/N	PKG	QTY
BAS521WT-MS	SOD-523	3000

Attention

■ Any and all MSKSEMI Semiconductor 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 and/or material damage. Consult with your MSKSEMI Semiconductor representative nearest you before using any MSKSEMI Semiconductor products described or contained herein in such applications.

■ MSKSEMI Semiconductor 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 specification of any and all MSKSEMI Semiconductor products described or contained herein.

■ Specifications of any and all MSKSEMI Semiconductor 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.

■ MSKSEMI Semiconductor strives to supply high-quality high-reliability products. However, any and all semiconductor products fail with some probability. It is possible that these probabilistic failures could give rise to accidents or events that could endanger human lives, that could give rise to smoke or fire, or that could cause damage to other property. When designing equipment, adopt safety measures so that these kinds of accidents or events cannot occur. Such measures include but are not limited to protective circuits and error prevention circuits for safe design, redundant design, and structural design.

■ In the event that any or all MSKSEMI Semiconductor 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.

■ 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 MSKSEMI Semiconductor.

■ Information (including circuit diagrams and circuit parameters) herein is for example only ; it is not guaranteed for volume production. MSKSEMI Semiconductor believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringement of intellectual property rights or other rights of third parties.

■ 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 MSKSEMI Semiconductor product that you intend to use.