BAT46ZFILM
SCHOTTKY BARRIER DIODE

Features

- Forward Continuous Current:I_F=150mA
- Power Dissipation of 500mW



SOD-123



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAT46ZFILM	SOD-123	S9	3000

Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Limit	Unit
Peak repetitive peak reverse voltage Working peak reverse voltage	V_{RRM} V_{RWM}	100	V
Forward continuous current	I_F	150	mA
Repetitive peak forward current (Note 1) @ tp < 1.0s, Duty Cycle < 50%	I_{FRM}	350	mA
Non-repetitive Peak Forward surge current @ t = 8.3ms	I_{FSM}	750	mA
Power dissipation	P_D	500	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	200	℃/W
Junction temperature	T_j	125	℃
Storage temperature	T_{STG}	-55~+150	℃

Electrical Characteristics(Ta=25°C unless otherwise specified)

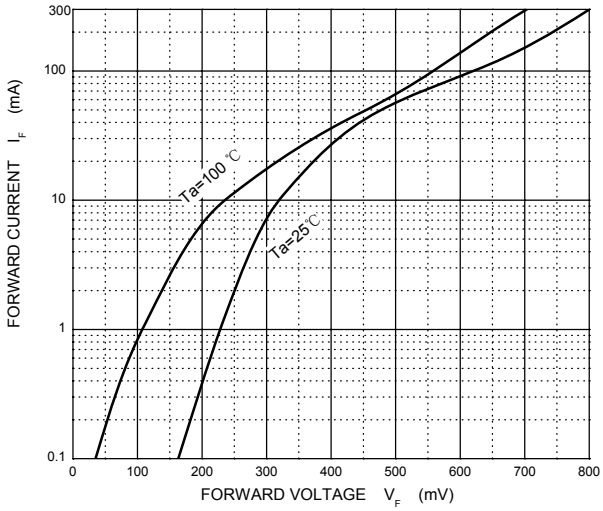
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage(Note 2)	V_R	I_R= 100μA	100			V
Reverse voltage leakage current	I_R	V_{R1}=1.5V			0.3	μA
		V_{R2}=10V			0.5	
		V_{R3}=50V			1	
		V_{R4}=75V			2	
Forward voltage(Note 2)	V_F	I_{F1}=0.1mA			0.25	V
		I_{F2}=10mA			0.45	
		I_{F3}=250mA			1	
Diode capacitance	C_T	V_R=0, f=1MHz		20		pF
		V_R=1V, f=1MHz		12		

Notes: 1. Part mounted on FR-4 board with recommended pad layout.

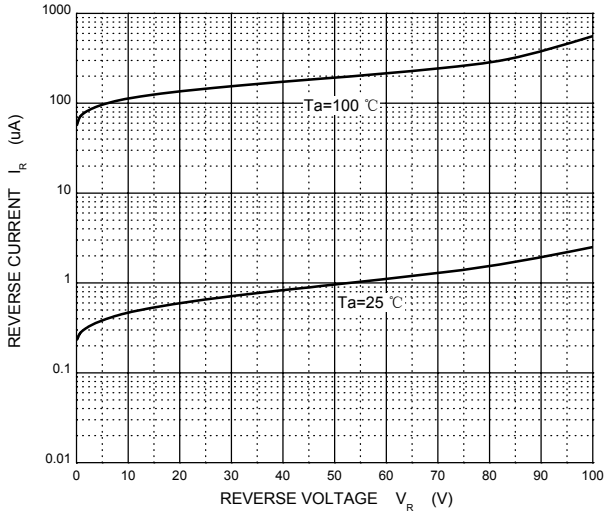
2. Short duration pulse test used to minimize self-heating effect.

Typical Characteristics

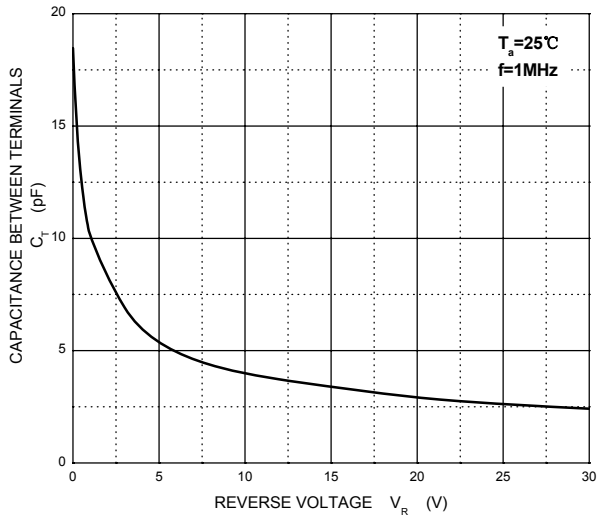
Forward Characteristics



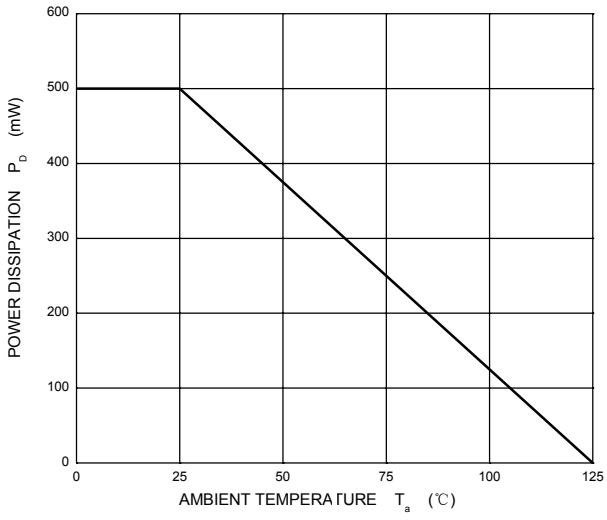
Reverse Characteristics



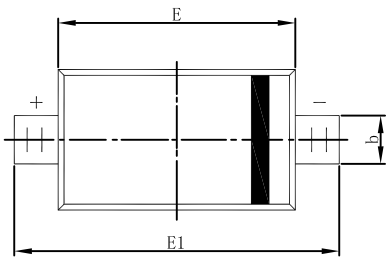
Capacitance Characteristics

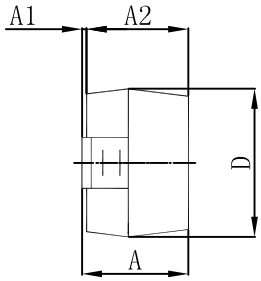


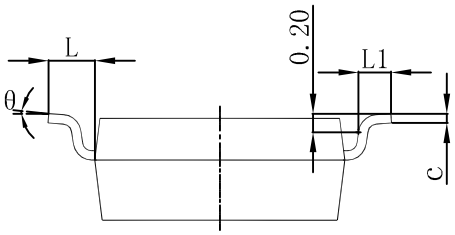
Power Derating Curve



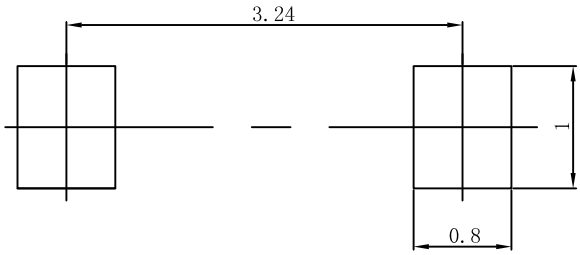
BAT46ZFILM
SCHOTTKY BARRIER DIODE







Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.

Attention

■ Any and all HUA XUAN YANG ELECTRONICS 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 HUA XUAN YANG ELECTRONICS representative nearest you before using any HUA XUAN YANG ELECTRONICS products described or contained herein in such applications.

■ HUA XUAN YANG ELECTRONICS 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 HUA XUAN YANG ELECTRONICS products described or contained herein.

■ Specifications of any and all HUA XUAN YANG ELECTRONICS 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.

■ HUA XUAN YANG ELECTRONICS CO.,LTD. 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 HUA XUAN YANG ELECTRONICS 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 HUA XUAN YANG ELECTRONICS CO.,LTD.

■ Information (including circuit diagrams and circuit parameters) herein is for example only ; it is not guaranteed for volume production. HUA XUAN YANG ELECTRONICS believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements 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 HUA XUAN YANG ELECTRONICS product that you intend to use.

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

HXY MOSFET:

HACPDQC5V0-HF AQ15C-01FTG AZ4007-01H ESD5L5.0C-HXY HESDSLC3V3D3B PJEC5V0M1FN2 BV05C-H ESD5LM5.0C-HXY HCEZ36V,L3F HSEN2411D3 HAZ4007-01H PESDNC2XD5VBF PJSD24CW_R1 TPSMB100CA-VR 60N06 HSG3D15B3.3MA HRCLAMP3371ZCTFT LM393DR-HXY PESDNC2XD5VBL HESD36VD3B HPTVSUC3D5VB HSD15C.TCT HSTS521050B331 PESDLC2FD3V3BH PESDSC2FD5VU TPSMB28A-VR AZ4836-01L HLY323BC1524L HSEN3611D3 RLSD32A121V