MSKSEMI 美森科
SEMICONDUCTOR

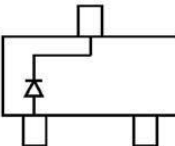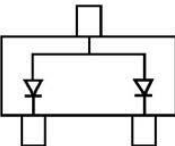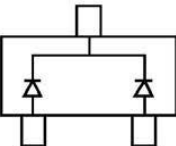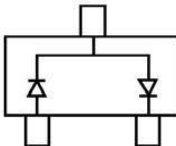| ESD | TVS | TSS | MOV | GDT | PLED |
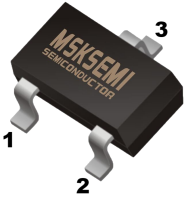
BAS40-XXLT1G(MS)

Product specification

SCHOTTKY BARRIERDIODE

FEATURES

- Low Forward Voltage

- Fast Switching

Reference News

PACKAGE OUTLINE	BAS40LT1G(MS)	BAS40-06LT1G(MS)	BAS40-05LT1G(MS)	BAS40-04LT1G(MS)
	43	**46**	**45**	**44**
SOT-23	MARKING:43	MARKING:46	MARKING:45	MARKING:44

Maximum Ratings @Ta=25℃

Parameter	Symbol	Limit	Unit
Peak repetitive peak reverse voltage	V_{RRM}		V
Working peak reverse voltage	V_{RWM}	40	V
DC blocking voltage	V_R		
Forward continuous current	I_{FM}	200	mA
Power dissipation	P_D	200	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	500	℃/W
Junction temperature	T_J	125	℃
Storage temperature range	T_{STG}	-55~+150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R=10μA	40		V
Reverse voltage leakage current	I_R	V_R=30V		200	nA
Forward voltage	V_F	I_F=1mA I_F=40mA		380 1000	mV
Diode capacitance	C_D	V_R=0,f= 1MHz		5	pF
Reverse recovery time	t_{rr}	I_T=1mA, I_R=I_F=10mA R_L=100Ω		5	ns

---

Typical Characteristics

Forward Characteristics

FORWARD CURRENT I_F (mA)

Ta=100℃

Ta=25℃

FORWARD VOLTAGE V_F (V)

Reverse Characteristics

REVERSE CURRENT I_R (uA)

Ta=100℃

Ta=25℃

REVERSE VOLTAGE V_R (V)

Capacitance Characteristics

CAPACITANCE BETWEEN TERMINALS C_T (pF)

**Ta=25℃
f=1MHz**

REVERSE VOLTAGE V_R (V)

Power Derating Curve

POWER DISSIPATION P_D (W)

AMBIENT TEMPERATURE T_J (℃)
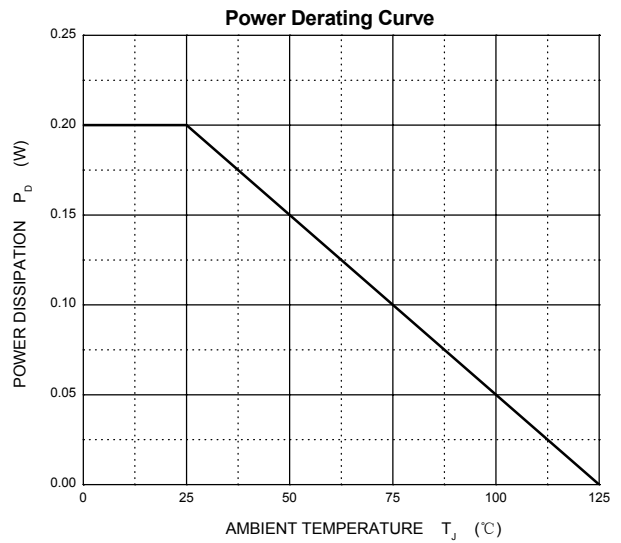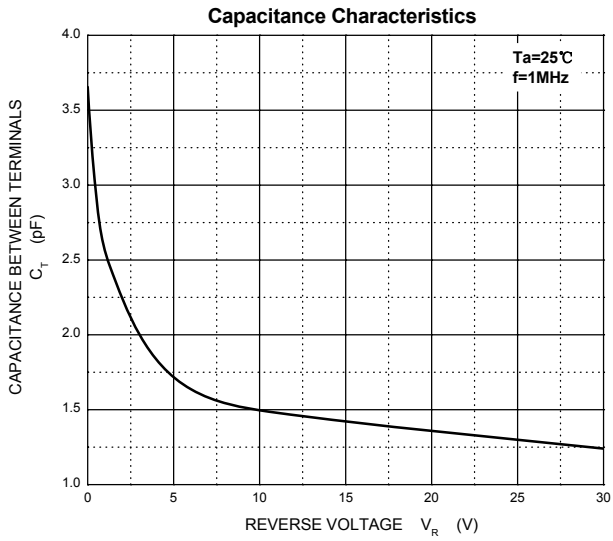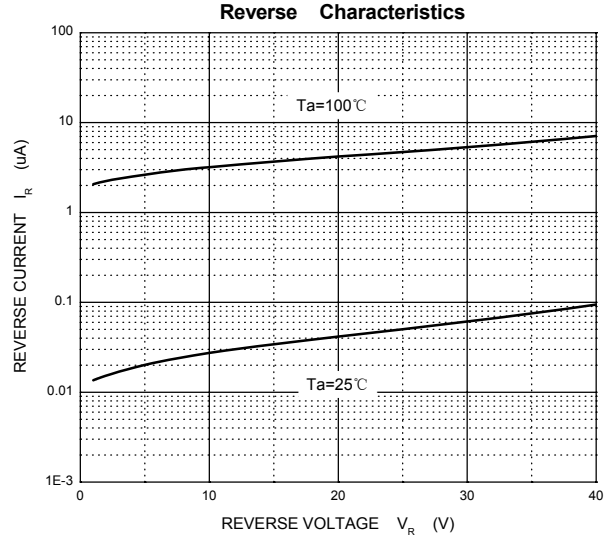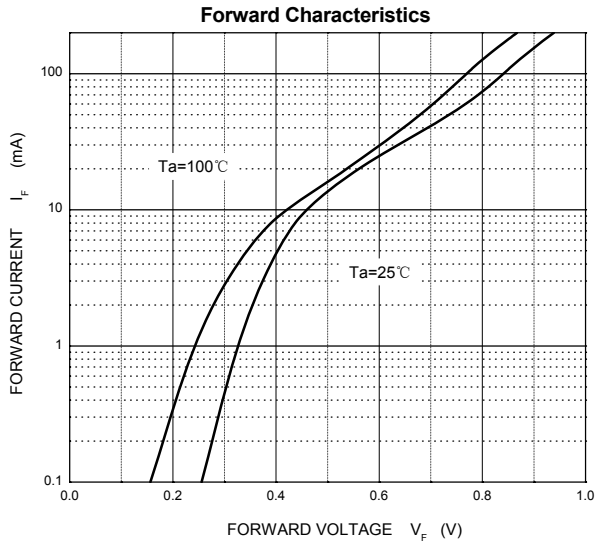
PACKAGE MECHANICAL DATA
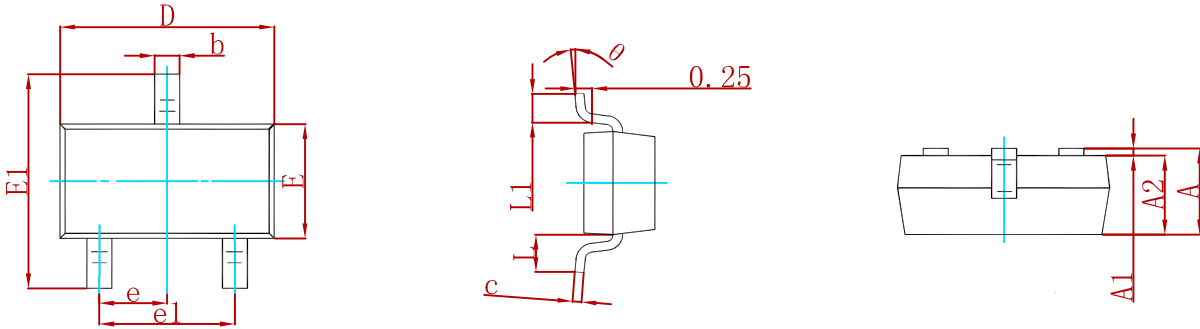
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

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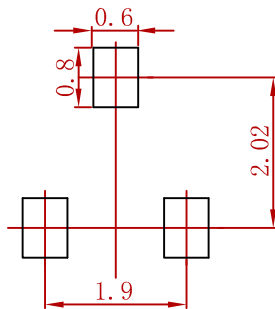
Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

REELSPECIFICATION

P/N	PKG	QTY
BAS40-XXLT1G(MS)	SOT-23	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 specificationsof any andall MSKSEMI Semiconductor products described orcontained 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'sproducts orequipment.

■ MSKSEMI Semiconductor. strives to supply high-quality high-reliability products. However, any and all semiconductor products fail with someprobability. It is possiblethat 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 anderror prevention circuitsfor safedesign, 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 theauthorities 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 infringementsof intellectual property rights or other rightsof third parties.

■ Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. Whendesigning equipment, referto the "Delivery Specification" for the MSKSEMI Semiconductor productthat you intend to use.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Schottky Diodes & Rectifiers *category:*

Click to view products by MSKSEMI *manufacturer:*

Other Similar products are found below :

MA4E2039   MMBD301M3T5G   RB160M-50TR   D83C   BAS16E6433HTMA1   BAS 3010S-02LRH E6327   BAT 54-02LRH E6327   NRVBAF360T3G   NSR05F40QNXT5G   NTE555   JANS1N6640   SS3003CH-TL-E   GA01SHT18   CRS10I30A(TE85L,QM   MBRA140TRPBF   MBRB30H30CT-1G   BAT 15-04R E6152   JANTX1N5712-1   DMJ3940-000   SB007-03C-TB-E   NRVBB20100CTT4G   NRVBM120LT1G   NTSB30U100CT-1G   CRG04(T5L,TEMQ)   ACDBA1100LR-HF   ACDBA1200-HF   ACDBA240-HF   ACDBA3100-HF   CDBQC0530L-HF   ACDBA260LR-HF   ACDBA1100-HF   10BQ015-M3/5BT   NRVBM120ET1G   SDM8M100P5-13   VSSB410S-M3/5BT   1N5819T-G   PDS1040Q-13   B160BQ-13-F   SDM05U20CSP-7   BAS 70-07 E6433   B140S1F-7   HSM560Je3/TR13   DDB2265-000   ZHCS506QTA   HSM190Je3/TR13   B330AF-13   ACDBUC0230-HF   SDM1U100S1F-7   MBR10200CTF-G1   CDLL5712