













ESD

TVS

TSS

MOV

GDT

PLED







FEATURES

- Very Low Forward Voltage Drop
- Guard Ring Die Construction for Transient Protection
- Ideally Suited for Automated Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 70A Peak

Mechanical Data

- Case: SMB
- Case Material: Molded Plastic;UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Lead Free Plating (Matte Tin Finish).
 Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- Weight: 0.064 grams (Approximate)

Reference News

PACKAGE OUTLINE	PIN CONFIGURATION	Marking Information
		B340LB
SMB(DO-214AA)		



Maximum Ratings(@TA= +25°C,unless otherwise specified.)

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	Vrrm		
Working Peak Reverse Voltage	VRWM	40	V
DC Blocking Voltage	VR		
Average Rectified Output Current (Note 5) TT = +90°C	lo	3.0	A
Non-Repetitive Peak Forward Surge Current, Single Sine-Wave Superimposed on Rated Load, 60Hz	IFSM	70	А

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Operating and Storage Temperature Range	Tj, Tstg	-55 to +150	°C

Electrical Characteristics (@TA = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Тур	Мах	Unit	Conditions
Reverse Breakdown Voltage (Note 6)	V(BR)R	40			V	I _R = 2.0mA
Forward Voltage Drop	VF		0.310	0.350 0.450	V	I _F = 1.0A I _F = 3.0A
				150	μA	Vr = 15V
Leakage Current (Note 6)	IR	_		1.0 2.0	mA	V _R = 20V V _R = 40V
Total Capacitance	Ст		180		pF	f = 1MHz, V _R = 4.0VDC
Thermal Resistance, Junction to Terminal	Rejt	_	35	_	°C/W	_

Notes:

5. Device mounted on FR-4 substrate, 0.4"*0.5", 2oz, single-sided, PC boards with 0.2"*0.25" copper pad.

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



B340LB-13-F(MS)





PACKAGE MECHANICAL DATA



	Dimensions				
Ref.	Millimeters		Inc	hes	
	Min.	Max.	Min.	Max.	
Α	4.25	4.75	0.167	0.187	
В	3.30	3.94	0.130	0.155	
С	1.85	2.21	0.073	0.087	
D	0.76	1.52	0.030	0.060	
E	5.08	5.59	0.200	0.220	
F	0.051	0.203	0.002	0.008	
G	0.15	0.31	0.006	0.012	
Н	2.11	2.44	0.083	0.096	
J	6.80		0.270		
K		2.60		0.100	
L	2.40		0.090		

REELSPECIFICATION

P/N	PKG	QTY
B340LB-13-F(MS)	SMB	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 specifications 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 someprobability. 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 anderror prevention circuits for 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 infringements 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. Whendesigning equipment, referto the "Delivery Specification" for the MSKSEMI Semiconductor productthat you intend to use.