# LOW VF SCHOTTKY DIODE MODULE TYPE

# **Features**

**High Surge Capability** 

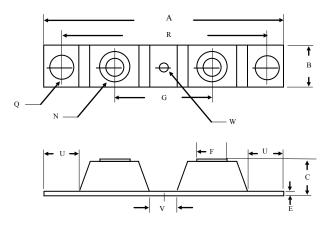
400 Amp Rectifier 30 Volts

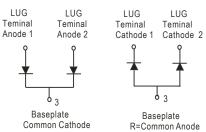
## **Maximum Ratings**

Operating Temperature: -40 °C to+100 °C Storage Temperatur: -40 °C to +150 °C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRA40030CTL	30V	21V	30V

### **HEAVY TWIN TOWER**





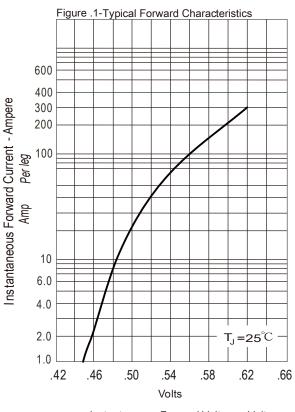
Electrical Characteristics @ 2	$\mathfrak{I}^{\circ}$ Unless Otherwise Specified
--------------------------------	---

Average Forward Current (Per pkg)	<b> </b> F(AV)	400A	TC=100°C
Peak Forward Surge Current (Per leg)	İFSM	3000A	8.3ms, half sine
Maximum Instantaneous Forward Voltage <sup>(Per leg)</sup>	V <sub>F</sub>	0.58V	<sup>1</sup> FM=200A; TJ=25 <sup>°</sup> C
Maximum Instantaneous Reverse Current At Rated DC Blocking	I <sub>R</sub>	3.0 mA	TJ= 25 °C
Voltage (Per leg)		200 mA	TJ =100 ℃
Maximum Thermal Resistance Junction To Case (Per leg)	Røjc	0.35 °C/W	

#### NOTE:

(1) Pulse Test: Pulse Width 300  $\mu$  sec. Duty Cycle < 2%

DIM	Inches		Millimeters		
	Min	Max	Min	Max	
A		3.64		92.3	
В	1.06	1.067	26.9	27.1	
С		0.740		18.8	
Е	0.134	0.14	3.4	3.55	
F	0.520	0.527	13.2	13.4	
G	1.49	BSC	38.0	BSC	
N	1/4-20 UNC FULL				
Q	0.275	0.290	6.99	7.37	
R	3.150	BSC	80.01	BSC	
U	0.512		13.0		
V	0.449	0.472	11.4	12.0	
W	0.180	0.195	4.57	4.95	



200 Average Forward Rectifer Current- Ampere Amp Per leg Amp 80 Single Phase, Half Wave 60Hz Resistive or Inductive Load 75 100 150  $^{\circ}$ C Case Temperature -  $\,^{\circ}$ C

Figure .2-Forward Derating Curve

240

Instantaneous Forward Voltage - Volts

Figure .3- Peak Forward Surge Current

6000

5000

9 4000 January 3000

3000

2000

1000

0

Peak Forward Surge Current-Ampere



2 8 10 20 40 Cycles

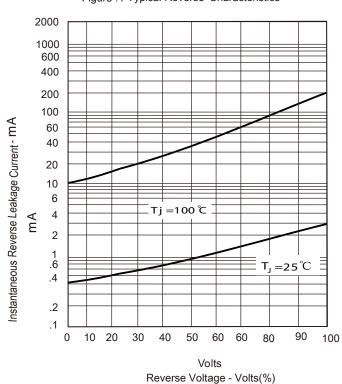
8.3ms Single Half

JEDEC method

Sine Wave

Number Of Cycles At 60Hz - Cycles

Figure .4-Typical Reverse Characteristics



www.dacosemi.com.tw

# MBRA40030CTL

## **Disclaimer**

DACO Semiconductor reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to this document and any product described herein.

DACO Semiconductor makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does DACO Semiconductor assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.

Purchasers is responsible for its products and applications using DACO Semiconductor products, including compliance with all laws, regulations and safety requirements or standards, regardless of any support or applications information provided by DACO Semiconductor. "Typical" parameters which may be provided in DACO Semiconductor data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts.

DACO Semiconductor products are not designed, authorized or warranted to be suitable for use in life support, life-critical or safety-critical systems or equipment, nor in applications where failure or malfunction of DACO Semiconductor's product can reasonably be expected to result in personal injury, death or severe property or environmental damage. DACO Semiconductor accept no liability for inclusion and/or use of DACO Semiconductor's products in such equipment or applications and therefore such inclusion and/or use is at the customer's own risk.

Purchasers buy or use DACO Semiconductor products for any such unintended or unauthorized application, Purchasers shall indemnify and hold DACO Semiconductor and its suppliers and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that DACO Semiconductor was negligent regarding the design or manufacture of the part.

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 DACO Semiconductor Co., Ltd.

Oct. 2019