

### Features

- High Current Density
- Ultra Low Thermal Resistance
- Very Low Forward Voltage Drop
- All Diffused Structure
- Ceramic Housing Hermetic Package

### Applications

- Resistance Welding
- Rectifiers for Galvanic Applications
- Low Voltage High Current Rectifier

W3



**12000 Amp  
Welding Diode  
200V~400V**

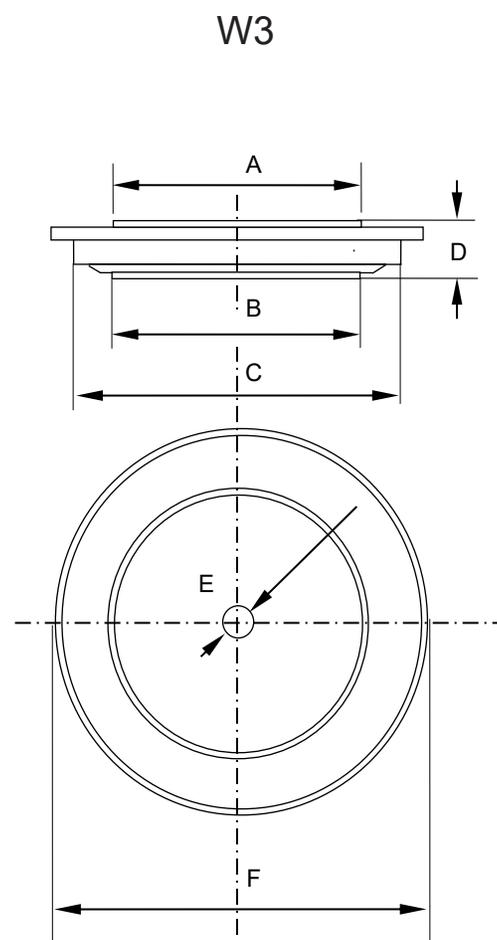
### Maximum Ratings

- Operating Junction Temperature Range: -40°C to +170°C
- Storage Temperature Range: -40°C to +170°C
- Max. Thermal Resistance: 0.006°C/W Junction to Case(Double sided cooled)
- Max. Thermal Resistance: 0.012°C/W Junction to Case(Single sided cooled)
- Max. Clamping Force: 30KN
- Typ. Weight: 205g

MCC Part Number	V <sub>RRM</sub>	V <sub>RSM</sub>
DZW12000-02	200V	300V
DZW12000-04	400V	450V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Max. Average Forward Current	I <sub>F(AV)</sub>	12000A	T <sub>C</sub> =85°C, θ = 180° Sine Pulse
Max. RMS Forward Current	I <sub>F(RSM)</sub>	18800A	
Max. Peak One Cycle Surge (Non Repetitive) Current	I <sub>FSM</sub>	85000A	t=10ms, Half Sine Pulse, T <sub>J</sub> =170°C;
Max. Rating for Fusing	I <sup>2</sup> t	36100KA <sup>2</sup> s	
Max. Peak Forward Voltage	V <sub>FM</sub>	0.99V	I <sub>FM</sub> =5000A, T <sub>J</sub> =25°C;
Max. Repetitive Peak Reverse Current	I <sub>RRM</sub>	15mA 50mA	V <sub>R</sub> =V <sub>RRM</sub> , T <sub>J</sub> =25°C; V <sub>R</sub> =V <sub>RRM</sub> , T <sub>J</sub> =170°C;
Max. Threshold Voltage	V <sub>TO</sub>	0.74V	T <sub>J</sub> =170°C;
Max. Slope Resistance	r <sub>T</sub>	0.019mΩ	T <sub>J</sub> =170°C;



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	2.244		57.00		Φ
B	2.244		57.00		Φ
C	2.815		71.50		Φ
D	0.315	0.331	8.00	8.40	
E	0.138	0.059	3.5	1.5	Φ
F	-	2.953	-	75.00	Φ

## Ordering Information

Device	Packing
Part Number-BP	Bulk: 12pcs/Box ;60pcs/Ctn

**\*\*\*IMPORTANT NOTICE\*\*\***

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages. **Micro Commercial Components Corp.** products are sold subject to the general terms and conditions of commercial sale, as published at <https://www.mccsemi.com/Home/TermsAndConditions>.

**\*\*\*LIFE SUPPORT\*\*\***

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

**\*\*\*CUSTOMER AWARENESS\*\*\***

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.