

Westpac Electronics Limited
威柏電子有限公司



威柏电子提供光伏变流核心功率器件



FE Fuji Electric 富士电机IGBT/IPM中国区一级代理-威柏电子

香港威柏
(852)2763 5991
(852)2343 6979

深圳威柏
0755-8826 7606
0755-8826 7406

上海威柏
021-5489 1460
021-5425 9682

北京威柏
010-6750 6489
010-6750 6489

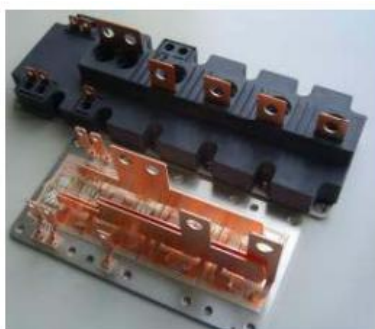
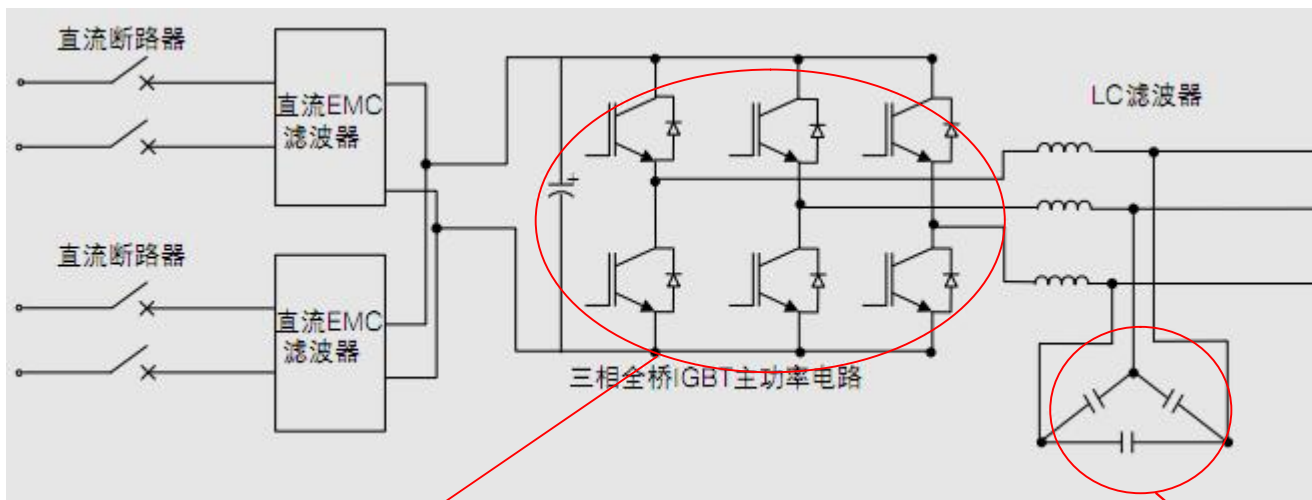
青岛威柏
0532-8823 1566
0532-8580 7948

成都威柏
028-8554 0368
028-8554 0368

www.westpac-hk.com 威柏电子整合功率半导体，全力支持中国电力电子工业发展！



威柏电子提供光伏变流核心功率器件





使用V系列芯片

符合RoHS



优良的热特性：

$T_j(\text{op})=150^{\circ}\text{C}$, $T_j(\text{max})=175^{\circ}\text{C}$

低损耗, 最新一代的V系列芯片 (大功率版)
低 V_{on} , 低浪涌电压, 软关断特性

低热阻

长温度循环寿命

PrimePACK 兼容

应用设计简易：

NTC 内置

符合RoHS

低寄生电感

缩减系统体积

易寻找替代产品

可与IFX4可共用驱动板

1200V 600A,900A in PP2

1200V 1400A and 1700V-1000A in PP3





| Type Name | Package type | Ic Rating [A] | VCES [V] | Tjmax / Tjop [deg.C] | *VCE(sat) [V] | *VF [V] | Base plate | DCB Material | Viso [kV] | CTI [V] |
|-----------------|--------------------|---------------|----------|----------------------|---------------|---------|-------------|--------------|--------------|---------|
| 2MBI450VXA-120 | Prime PACK 2 互换 | 450 | 1.2kV | 175 / 150 | 1.70 | 1.90 | Copper (Cu) | Al2O3 | 4.0kV / 1min | 600< |
| 2MBI600VXA-120 | | 600 | | | | | | | | |
| 2MBI900VXA-120 | | 900 | | | | | | | | |
| 2MBI450VXA-170 | | 450 | 1.7kV | | 2.00 | 1.85 | | | | |
| 2MBI650VXA-170 | | 650 | | | | | | | | |
| 2MBI1400VXB-120 | Prime PACK 3 互换 | 1400 | 1.2kV | 175 / 150 | 1.70 | 1.90 | Copper (Cu) | Al2O3 | 4.0kV / 1min | 600< |
| 2MBI1000VXB-170 | | 1000 | 1.7kV | | 2.00 | 1.85 | | | | |

*) 条件: Ic=If= 基准电流, Tj=25度

富士 Prime PACK 兼容 模块



2MBI600VN-120-50

IGBT Modules

IGBT MODULE (V series)
1200V / 600A / 2 in one package

NewDual 122 x 62 x 17mm

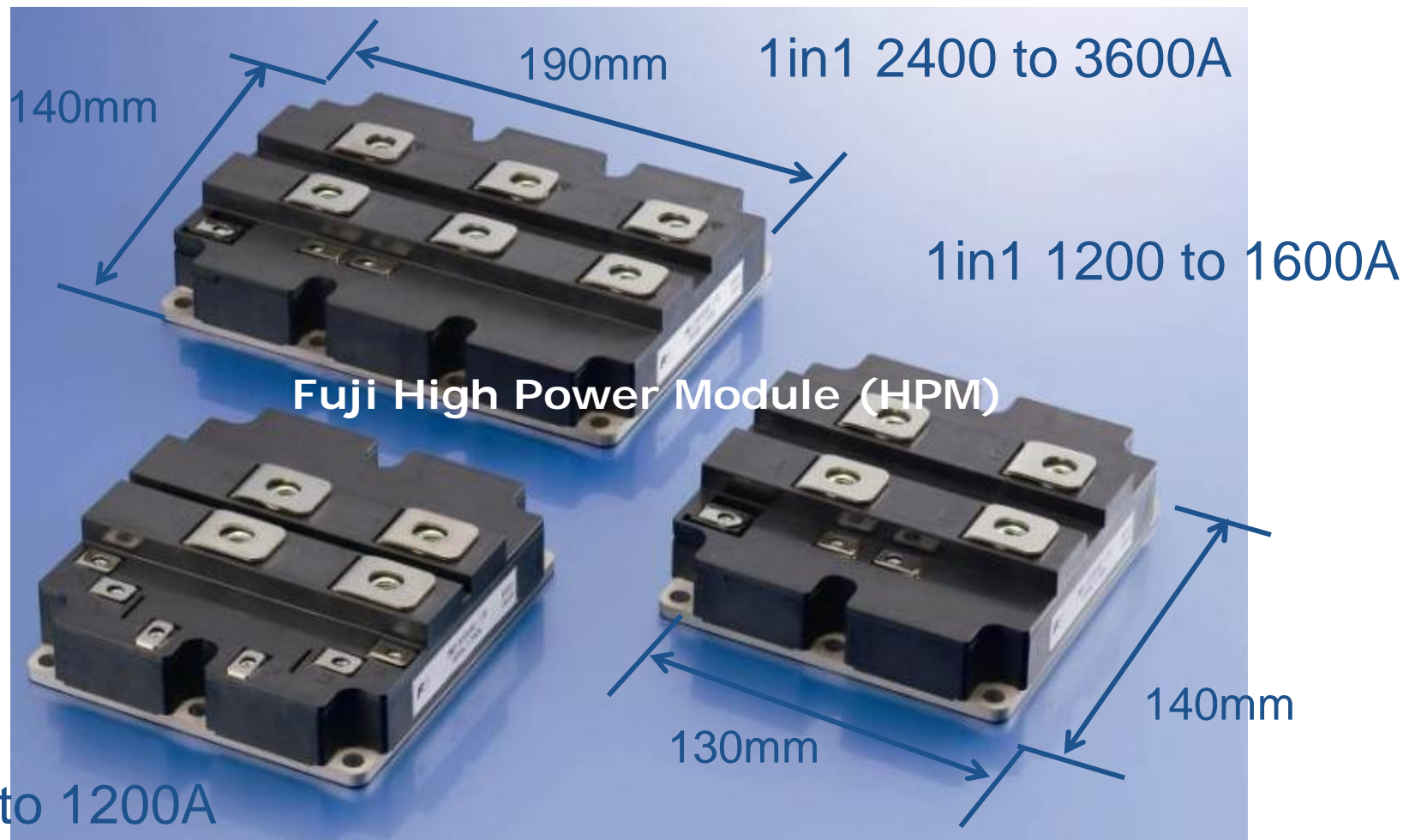
■ Features

- High speed switching
- Voltage drive
- Low Inductance module structure

■ Applications

- Inverter for Motor Drive
- AC and DC Servo Drive Amplifier
- Uninterruptible Power Supply
- Industrial machines, such as Welding machines





In production with U4-silicon




In production with U4-silicon

| Type name | Ic rating | VCES | Package | Base Plate | Isolation |
|-----------------|-----------|-------|---|-------------|--------------------------|
| 1MBI1200U4C-120 | 1200A | 1200V | M151 : size 130 x 140 x 38mm  | Copper (Cu) | Silicone Nitride (Si3N4) |
| 1MBI1600U4C-120 | 1600A | | | | |
| 1MBI1200U4C-170 | 1200A | 1700V | | | |
| 1MBI1600U4C-170 | 1600A | | | | |
| 1MBI2400U4D-120 | 2400A | 1200V | M152 : size 190 x 140 x 38mm  | Copper (Cu) | Silicone Nitride (Si3N4) |
| 1MBI3600U4D-120 | 3600A | | | | |
| 1MBI2400U4D-170 | 2400A | 1700V | | | |
| 1MBI3600U4D-170 | 3600A | | | | |



In production with U4-silicon

| Type name | Ic rating | VCES | Package | Base Plate | Isolation |
|-----------------|-----------|-------|---|-------------|--------------------------|
| 2MBI600U4G-120 | 600A | 1200V | M256 : size 130 x 140 x 38mm  | Copper (Cu) | Silicone Nitride (Si3N4) |
| 2MBI800U4G-120 | 800A | | | | |
| 2MBI1200U4G-120 | 1200A | | | | |
| 2MBI600U4G-170 | 600A | 1700V | | | |
| 2MBI800U4G-170 | 800A | | | | |
| 2MBI1200U4G-170 | 1200A | | | | |



- **Function:**
 - stabilizing DC-link voltage
- **Typical requirements:**
 - C = 3300 to 4700 uF and U = 690V !!!
- **Suitable Vishay film capacitor series:**
 - MKP 1848 DC-Link and customized MKP 1849





IGBT吸收电容

- **Function:**
 - reduce voltage and current spikes (limit dU/dt and dI/dt) in power semiconductor switching applications in order to protect semiconductors, reduce total losses and EMI
- **Typical requirements:**
 - $C < 1 \mu\text{F}$ and $U = 1200\text{V}$
because $C \approx 1 / (U^2 \times f)$
- **Suitable Vishay film capacitor series:**
 - MMKP 386





交流滤波电容

- **Function:**
 - reduce higher harmonics of line frequency
- **Typical requirements and suitable Vishay ESTA caps:**
 - U up to 760V and power up to 50 kVAR: PhMKDg
 - U up to 1400V and power up to 350 kVAR: PhMKPg
 - U up to 24 kV and power up to 800 kVAR: Pha...
- **Vishay-ESTA also provides power caps. for HVDC power lines → next page**





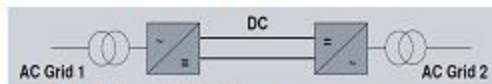
off-shore windpark



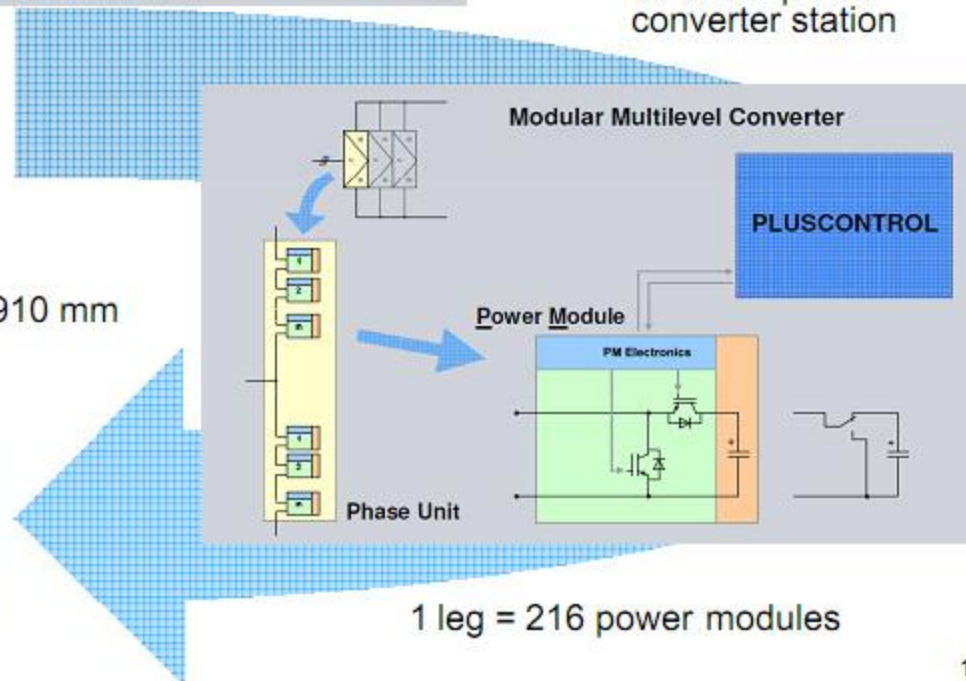
- ESTA Capacitor
DCMKP 2.65 / 4.4 mF
U = 2650 VDC
C = 4400 μ F
LxWxH = 340 x 175 x 910 mm
weight = 70kg



HVDC power line



on-shore power
converter station



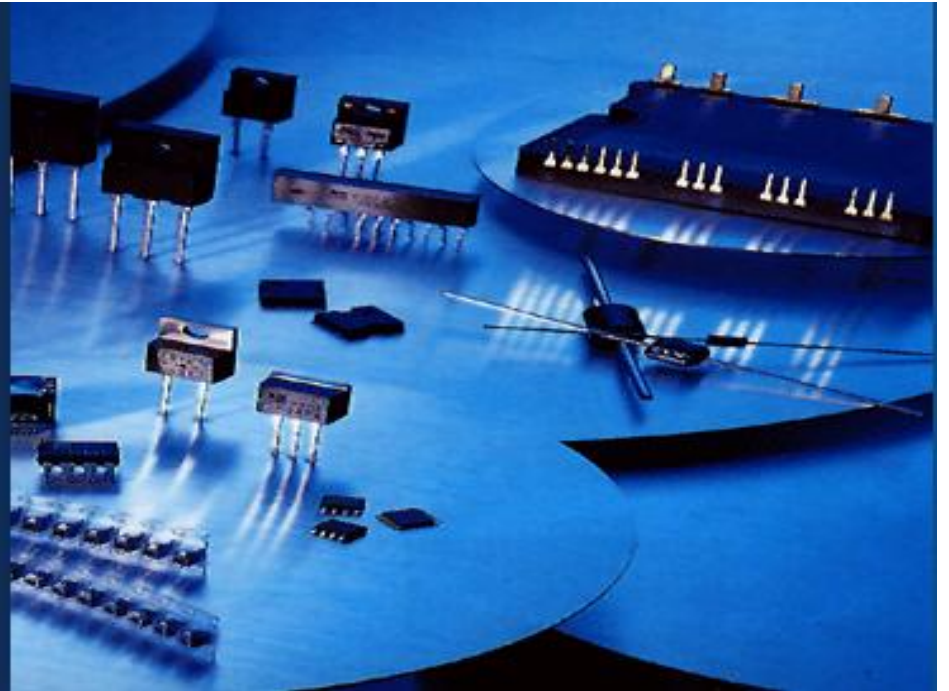


- **Vishay offers special DC Power capacitors for:**
 - HVDC-Transmission Off-Shore
 - SVC (Static VAR compensation)
 - FACTS (Flexible AC Transmission Systems)
- **ESTA DC-Capacitors are key-components for modern IGBT-Converter Technologies**



Source: Global Wind Energy Council Report

Westpac Electronics Limited
威柏電子有限公司



威柏電子有限公司

Westpac深圳分公司:

深圳市威柏德电子有限公司

深圳: 深圳市福田区金田路诺德中心17楼B室

Nobel Center 17B Room, JinTian Road, Futian District

电话: 0755-88267606 88262913 88262982 88262986 传真: 0755-88267406