



VISHAY INTERTECHNOLOGY, INC.



BRIDGE MODULES

MTK MTP Pace-Pak MT MB GBPC KBPC KAB KBB KBB **BRIDGE MODULES**



Versatile and high-efficiency bridge modules from Vishay Intertechnology feature industry-standard outlines with a choice of single-phase and three-phase rectifying bridges. The modules are the ideal choice for input rectification applications at either low or high voltages, with the electrical isolation between the baseplate and the active semiconductors providing a key advantage over discrete components. External electrical connections are provided with a choice of different terminal options, including fast-on, solderable pins, and bolt down.

Vishay high-power bridge modules are RoHS-compliant and meet industry standards for safety, including UL approval. The devices are recognized throughout the world for their ruggedness, high reliability, and consistency of mechanical specifications and electrical characteristics.

Features

- Wide range of package styles and configurations with diode and/or thyristor technologies
- Direct mounting on heatsink
- Compact case styles for screw, solderable pin, and fast-on plug terminations
- High isolation voltage
- RoHS-compliant
- Low thermal resistance
- UL approved
- High surge current

Options

- Customizable for specific application needs
- Temperature sensor available in some package styles

Applications

• Single- and three-phase input rectification

For technical support, contact: ind-modules@vishay.com

For further information: http://www.vishay.com/ref/bridge-modules

| Package Type, Bridges | Max. Dim., LWH (mm) | Pin-out | Number of Connectors | Available Circuit Configurations | Voltage Range (V) | Current Ratings at 25 °C (A) | Part Number Series | Silicon Technology |
|-----------------------------|------------------------|--------------------------------|-------------------------|---|-------------------------|---------------------------------------|-----------------------|-----------------------|
| | | | | 3-Phase Bridge | 400–1600 | 60–200 | MTK | Diode |
| МТК | 94 x 35 x 30 | Screwable | Up to 14 | 3-Phase Bridge | 1200 | 90 | 90MTFK | Fast Diode |
| | | | | 3-Phase Bridge half/fully controlled | 800–1600 | 55–110 | MTK | SCR-Diode |
| | | Solderable | | 3-Phase Bridge | | | | SCR |
| MTP | 63.5 x 33 x 16 | Pins | Up to 12 | Customized configuration | 1600 | 40–100 | MTP | Diode |
| | | | | 1-Phase Bridge | | | | SCR |
| | | Fast-on, | | AC Switch | | | | |
| Pace-Pak | 63.5 x 32.5 x 15.5 | Solderable Pins | Up to 8 | Doubler | 400–1200 | 25–40 | P100–P400 | Diode |
| | | | | Customized Configuration | | | | |
| MT | 28.5 x 28.5 x 10 | Fast-on, Solderable Pins | 5 | 3-Phase Bridge | 100–1600 | 25–35 | 26MT36MT | Diode |
| MB | 28.5 x 28.5 x 10 | Fast-on, Solderable Pins | 4 | 1-Phase Bridge | 200–1600 | 25–35 | 26MB36MB | Diode |
| GBPC | 28.6 x 28.6 x 7.7 | Fast-on, Solderable Pins | 4 | 1-Phase Bridge | 200–1200 | 25–35 | GBPC25GBPC35 | Diode |
| KBPC | 15.2 x 15.2 x 4.8 | Solderable Pins | 4 | 1-Phase Bridge | 50–1000 | 3–6 | KBPC1 KBPC6 | Diode |
| KDPC | | | | | | 6–8 | KBPC6 KBPC8 | Diode |
| KAB | 9.2 x 9.2 x 9.8 | Solderable Pins | 4 | 1-Phase Bridge | 100–1000 | 1.2 | 1KAB-E | Diode |
| KBB | 17.5 x 15 x 6.5 | Solderable Pins | 4 | 1-Phase Bridge | 100–1000 | 1.9 | 2KBB | Diode |
| KBP | 17.5 x 15 x 6.5 | Solderable Pins | 4 | 1-Phase Bridge | 50–1000 | 2 | 2KBP | Diode |



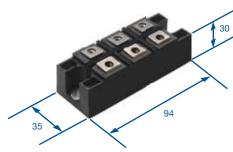
| | | Current | | MTK Bridge | MTP Bridge | Pace-Pak Bridge | MT Bridge | | |
|--------------------------------------|-------------------|---------------|--|---------------------------------------|------------|-----------------|-----------|---------------|--|
| Configuration | Voltage (V) | Rating (A) | Recovery | . and a | | | See 1 | | |
| Loff Bridge | | 25 | | | | P17 | | | |
| Half Bridge, Fully | 400–1600 | 40 | 1 ' | · · · · · · · · · · · · · · · · · · · | t | P47 | | \rightarrow | |
| Controlled | | 56 | 1 1 | · · · · · · · · · · · · · · · · · · · | | | | | |
| | 1 | 25 | Standard | í | | P16 | | | |
| Half Bridge, Positive | 400–1600 | 40 | 1 ' | · · | | P46 | | | |
| Controlled | 400-1000 | 56 | ' | | | | | | |
| |] | 70 | <u> </u> ' | ' | | | | | |
| | | 15 | - ' | ' | <u> </u> | - | | | |
| | 800–1200 | 25 | Standard | ' | | + | | | |
| - | | 35 15 | <u> </u> | t' | | + | | | |
| | 1200–1600 | 15 25 | Standard | ' | + | + | | | |
| Single-Phase Diode Bridges | | 25 1 | | t' | + | + | | | |
| loue price. | , I | 2 | | <u> </u> ' | + | + | | | |
| | 50–1000 | 3 | Standard | , , | + | + + | | | |
| | } | 4 | | · · · · · · · · · · · · · · · · · · · | + | + + | | | |
| | , t | 5 | 1 ' | , , | | + | | | |
| Single-Phase | | 25 | † · · | · · · · · · · · · · · · · · · · · · · | | P11 | | | |
| Negative- | 400–1600 | 30 | Standard | · · · · · · · · · · · · · · · · · · · | [| | | | |
| Controlled Bridges | 400-1000 | 40 | | 1 | | P41 | | | |
| | | | <u> </u> | t' | + | | | | |
| Single-Phase Positive- | 1000 | 25 | I | ' | + | P10 | | | |
| Controlled Bridges | 400–1600 | 40 | Standard | | | P40 | | _ | |
| Single- | | 25 | Г I | ' | | P13 | | _ | |
| Phase Fully Controlled Bridges | 400–1600 | 40 | Standard | | | P43 | | | |
| | ,; | 25 | · / · · · | · · · · · · · · · · · · · · · · · · · | t | | 26MT | | |
| | , t | 35 | 1 1 | · · · · · · · · · · · · · · · · · · · | | | 36MT | | |
| | , I | 45 | Standard | | 40MTP | | | | |
| | | 60 | 1 ' | 60MTK | | | | | |
| | . I | 70 | L′ | 70MTK | 70MTP | | | _ | |
| | Up to 1600 | 90 | Standard | 90MTK | | | | _ | |
| Diode Bridges | . I | | Fast | 90MTF120KPBF | | | | | |
| | . I | 100 | | L | 100MTP | 4 | | | |
| | . I | 110 | 4 ' | 110MTK | | | | | |
| | . I | 130 | Standard | 130MTK | | + | | | |
| - | 11 to 400 | 160 | ' | 160MTK | L | + | | | |
| | Up to 400 | 200 | <u> </u> | 200MTK 51MT K | L | + | | | |
| Three-Phase Negative- | 55 400–1600 90 | 4 | 51MTK 91MTK | L | | | | | |
| Controlled | 400–1600 | | Standard | | | + | | | |
| Bridges |] | 110 | <u> </u> | 111MTK | · | | | | |
| Three-Phase | | 45 | · | | 42MTP | | | _ | |
| Positive- | 400–1600 | 55 | Standard | 52MTK | 55MTP | | | | |
| Controlled Bridges | чоо | 90 | ' | 92MTK | L | _ | | | |
| |] | 110 | <u> '</u> | 112MTK | 105MTP. | 4 | | | |
| Three- | . I | 55 | ' | 53MTK | L | - | | _ | |
| Phase Fully Controlled | 400–1600 | 90 | Standard | 93MTK | L | + | | _ | |
| Bridges | | 110 | 1 | 113MTK | | | | | |

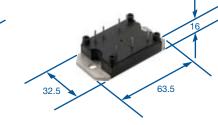
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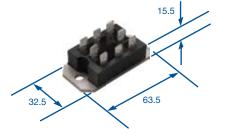


| Bridges | | | | | |
|-----------|-------------|----------------|------------|------------|------------|
| MB Bridge | GBPC Bridge | KBPC Bridge | KAB Bridge | KBB Bridge | KBP Bridge |
| R | RR | | 111 | -//- | |
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| 26MB | GBPC25 | | | | |
| 36MB | GBPC35 | | | | |
| 26MB | GBPC25 | | | | |
| 36MB | GBPC35 | | | | |
| 26MB | | | | | |
| 36MB | | | | | |
| | | | 1KAB-E | | |
| | | | | 2KBB | 2KBP |
| | | KBPC1 KBPC3 | | | |
| | | KBPC8 | | | |
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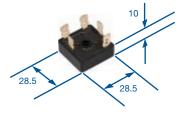




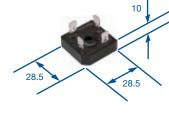
MTK

MTP

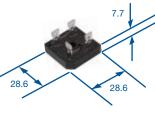




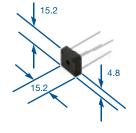
MT



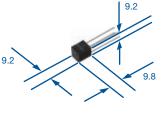
MB



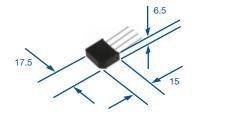
GBPC



KBPC



KAB



KBB

17.5

KBP

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