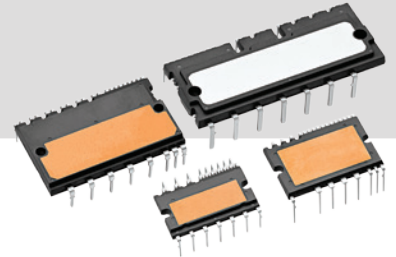




# Version 6 DIIPM™



## Applications

- Servo / motion controls
- HVAC
- Home appliances
- Pumps
- Low-capacity industrial inverter

## Product Advantages

- Built-in bootstrap diodes and current limiting resistors
- High-accuracy analog temperature output
- Standardized packages simplify design cycles

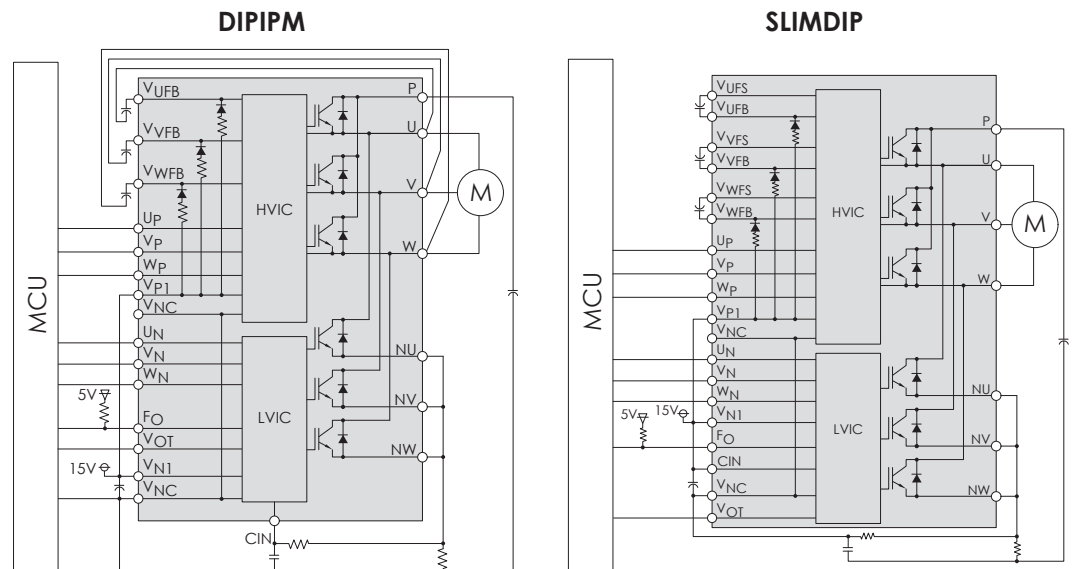
## Overview

Powerex Version 6 DIIPM™ simplifies the design of low power inverters for residential, commercial, and industrial applications. Standard features such as analog temperature output and built-in bootstrap diodes reduce the need for peripheral components, thus reducing overall system costs.

By using the latest low loss IGBT (7th Generation CSTBT™), the product line-up has been expanded to suit a wider range of applications. The design effort is minimized, as Version 6 DIIPM employs the same standard external packaging previously introduced for Versions 4 and 5.

New to the DIIPM line-up is our SLIMDIP line. SLIMDIP is an ultra-small, compact intelligent power module with a transfer mold package suitable for larger mass production. As with all Powerex DIIPMs, the power chips, drive, and protection circuits are integrated in the SLIMDIPs, providing a simple solution for AC 100-200V class low-power motor inverter control.

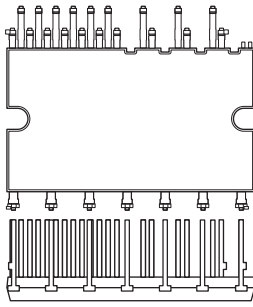
## Simplified Block Diagram



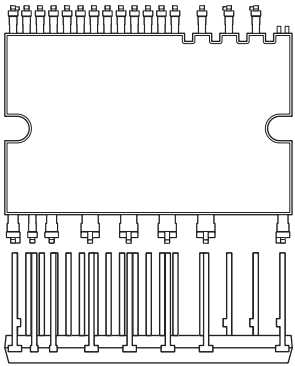
[www.pwr.com](http://www.pwr.com)

*Serving Our Customers Through Expertise, Innovation and Reliability*

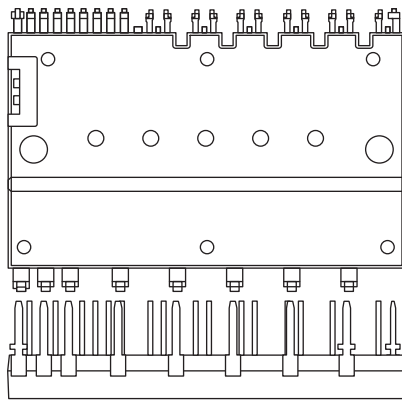
## DIIPM Packages



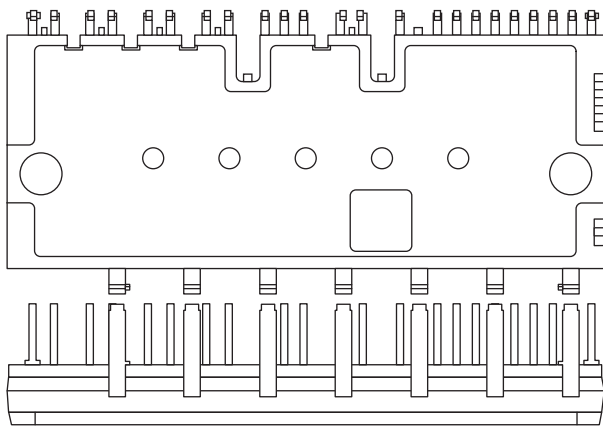
**SLIMDIP**  
(32.8mm x 18.8mm x 10.7mm)



**Super Mini MOSFET  
& Super Mini DIIPM**  
(38mm x 24mm x 14mm)



**Mini DIIPM**  
(52.5mm x 31mm x 12.7mm)



**Large DIIPM**  
(79mm x 31mm x 16mm)

## Line-up Table

Part Number	$V_{DSS}$	$I_D$	$I_{D(peak)}$
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### Super Mini MOSFET DIIPM

PSM03S93E5-A	500V	3A	6A
PSM05S93E5-A	500V	5A	10A

Part Number	$V_{CES}$	$I_C$	$I_{C(peak)}$
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### SLIMDIP

SLIMDIP-L	600V	15A	30A
SLIMDIP-S	600V	5A	30A

### Super Mini DIIPM

PSS05S92F6-AG	600V	5A	10A
PSS10S92F6-AG	600V	10A	20A
PSS15S92F6-AG	600V	15A	30A
PSS20S92F6-AG	600V	20A	40A
PSS30S92F6-AG	600V	30A	60A
PSS35S92F6-AG	600V	35A	70A

### Mini DIIPM

PSS20S71F6	600V	20A	40A
PSS30S71F6	600V	30A	60A
PSS50S71F6	600V	50A	100A
PSS05S72FT	1200V	5A	10A
PSS10S72FT	1200V	10A	20A

### Large DIIPM

PSS05SA2FT	1200V	5A	10A
PSS10SA2FT	1200V	10A	20A
PSS15SA2FT	1200V	15A	30A
PSS25SA2FT	1200V	25A	50A
PSS35SA2FT	1200V	35A	70A
PSS50SA2FT	1200V	50A	100A



### Mitsubishi Power Module Loss Simulator

(MELCOSIM) software, available at [www.pwr.com](http://www.pwr.com), validates device selection based on your specific conditions.

For more information:

visit: <http://www.pwr.com/summary/DIIPM.aspx>

email: [globalsales@pwr.com](mailto:globalsales@pwr.com)

phone: 724-925-7272, Option 3 (Applications Engineering Assistance)



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