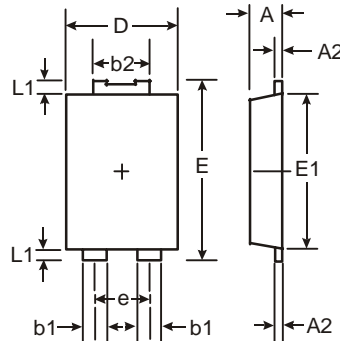
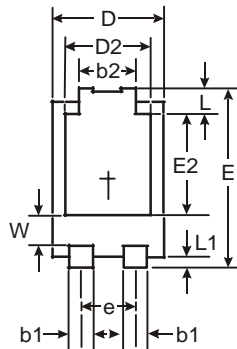


## Announcing Expansions of Popular PowerDI™5 Product Line into Standard Recovery Rectifiers



Dim	Min	Max
<b>A</b>	1.05	1.15
<b>A2</b>	0.33	0.43
<b>b1</b>	0.80	0.99
<b>b2</b>	1.70	1.88
<b>D</b>	3.90	4.05
<b>D2</b>	3.05 NOM	
<b>E</b>	6.40	6.60
<b>e</b>	1.84 NOM	
<b>E1</b>	5.30	5.45
<b>E2</b>	3.55 NOM	
<b>L</b>	0.75	0.95
<b>L1</b>	0.50	0.65
<b>W</b>	1.20	1.50
<b>All Dimensions in mm</b>		



*Diodes, Inc. patent-pending flat lead frame heat-sink solder pad results in higher power dissipation and surge capabilities in a compact low profile package*

### Product Highlights

- Small footprint, low profile package is ideal for space-constrained applications, such as portable electronics.
- Qualified to rigorous AEC-Q101 automotive standards to ensure high reliability.
- Excellent stability even under high ambient temperatures and reverse bias up to 400 Volts.
- RoHS Compliant: Lead free terminal plating and green molding compound assure compliance to the highest environmental standards.

### Availability

- **Samples:** Now Available!
- **Production Quantity Lead Time:** 6 – 10 weeks
- **Data Sheets Available NOW at:** [www.diodes.com](http://www.diodes.com)

To download selected data sheet, enter p/n in our website Product Data Sheet search, or click:

[PDR3G](#)      3 Ampere / 400 Volts  
[PDR5G](#)      5 Ampere / 400 Volts

## Crosses to Other Manufacturers' Parts

Diodes' "New" PowerDI™5 products are thermally efficient replacements for the following devices:

Diodes, Inc.	Vishay-GS		Diodes, Inc.	
P/N	P/N	Package	P/N	Package
PDR3G	S3G	SMC	S3GB / S3G	SMB / SMC
PDR5G			S5GC	SMC

## Dimensional Highlights

- Low profile: Only 1.1mm tall, ideal for height limited applications. Compare with 2.3mm for SMC and DPAK, and 4.4mm for D<sup>2</sup>PAK.
- Small footprint: Occupies only 23.8mm<sup>2</sup> of PCB area, which can be compared with:
  - 47mm<sup>2</sup> for SMC (PowerDI™5 consumes 49% less area than SMC)
  - 61.5mm<sup>2</sup> for DPAK (PowerDI™5 consumes 55% less area than DPAK)

## Thermal Performance Benefits

- **Twice the Power Density of Competitive Package Types --**  
Highest power density package: 55mW/mm<sup>2</sup>, which can be compared with:
  - 25mW /mm<sup>2</sup> for SMC
  - 28 mW /mm<sup>2</sup> for DPAK
- **Up to 50% Lower Thermal Resistance than Competitive Package Types --**  
Thermally efficient package: R<sub>θJS</sub> = 1.5 - 6.0°C/W, which can be compared with:
  - 10 - 15°C/W for SMC
  - 2.4 - 6.0°C/W for DPAK

## Solderability & Environmental Highlights

- RoHS Compliant
- "Green" (No Bromine, Antimony) Molding Compound
- Pb-Free, 100% Matte Tin Plating
- Withstands 260°C Solder Reflow
- Meets Moisture Sensitivity Level (MSL) 1

## End Equipment Applications

- Automotive
- Disk drives
- Inverters
- Power management circuits
- Industrial controls
- Set top boxes
- Networking equipment, routers, hubs
- Computer peripherals; printers

PowerDI is a trademark of Diodes Incorporated.