

# PSD5008 Thru PSD5016

High Current Glass Passivated Molding Three -Phase Bridge Rectifier

Reverse Voltage 800 to 1600V Forward Current 50A

## FEATURES

- I Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- I High current capacity with small package
- I Glass passivated chip junctions
- I Superior thermal conductivity
- I High IFSM

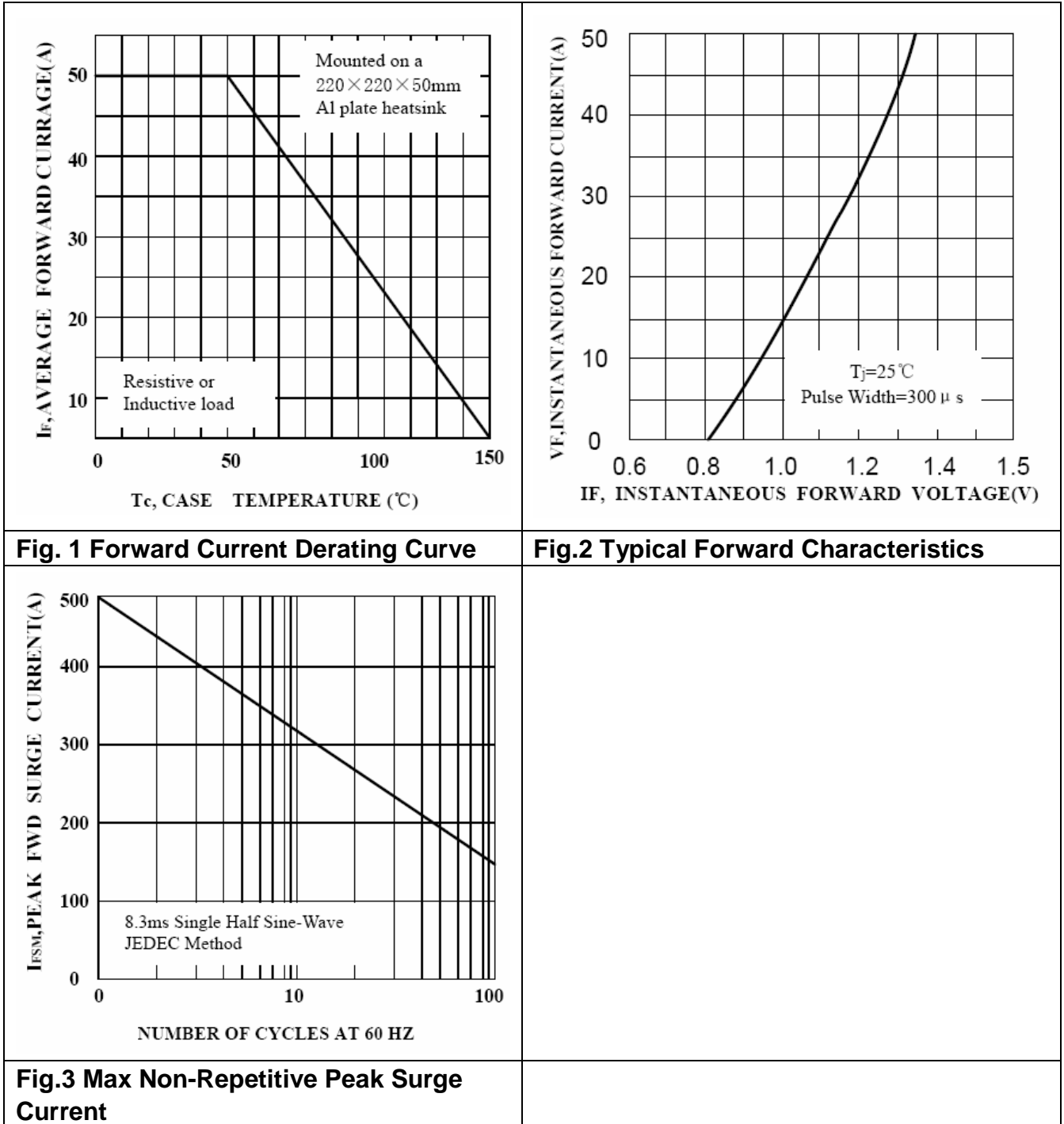


### 1. Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| Item   | Symbol           | PSD5008 | PSD5012 | PSD5014 | PSD5016 | Unit               |
|--|------------------|---------|---------|---------|---------|--------------------|
| Maximum repetitive voltage   | VRM              | 800     | 1200    | 1400    | 1600    | V                  |
| Maximum RMS Voltage  | VRMS             | 560     | 840     | 980     | 1120    | V                  |
| Maximum DC Blocking Voltage  | VDC              | 800     | 1200    | 1400    | 1600    | V                  |
| Peak Reverse Current (per leg) @Tj = 25°C  | IR               | 5       |         |         |         | μA                 |
| At Rated DC Blocking Voltage @Tj = 125°C   |                  |         |         |         |         | 5.0                |
| Average rectified forward current 60Hz sine wave, R-load with heatsink Tc=50°C   | Io               | 50      |         |         |         | A                  |
| Non-Repetitive Peak Forward Surge Current<br>(No Voltage Reapplied t = 8.3ms at 60Hz)<br>(No Voltage Reapplied t = 10ms at 50Hz)<br>(100% VRRM Reapplied t = 8.3ms at 60Hz)<br>(100% VRRM Reapplied t = 8.3ms at 50Hz) | IFSM             | 500     |         |         |         | A                  |
|  |                  | 475     |         |         |         |                    |
|  |                  | 420     |         |         |         |                    |
|  |                  | 400     |         |         |         |                    |
| RMS Isolation Voltage from Case to Lead  | VISOL            | 2500    |         |         |         | V                  |
| Max instantaneous forward voltage @25 A/25°C   | VF               | 1.05    |         |         |         | V                  |
| Typical Thermal Resistance per Element   | RθJC             | 0.9     |         |         |         | °C/W               |
| I <sup>2</sup> t Rating for Fusing   | I <sup>2</sup> t | 1030    |         |         |         | A <sup>2</sup> sec |
| Operating junction temperature   | Tj               | -40~150 |         |         |         | °C                 |
| Storage temperature  | Tstg             | -40~150 |         |         |         | °C                 |

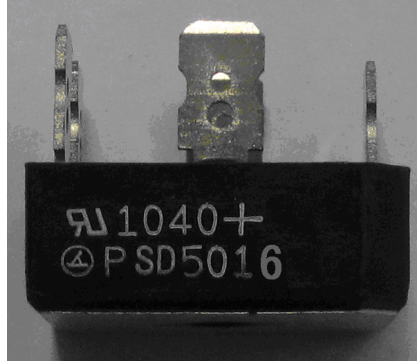
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## 2. Ratings and Characteristic Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted )



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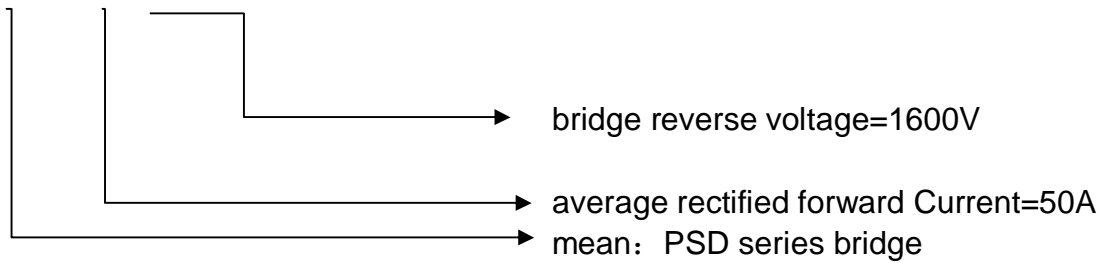
## 3. Marking Identification



**Note:**

生产日期码包含4位数字，例如“1040”，前两个数字“10”表示为2010年，另外二个数字“40”是指第40周，即表示该产品为2010年40周生产。

型号：**PSD 50 16**



## 4. Dimension

