

### Silicon Power Diode

PSM/PSMR 60L  
PSM/PSMR 60K

$$I_{F(AV)} = 60 \text{ A}$$

$$V_{RRM} = 100 - 1600 \text{ V}$$

Preliminary Data Sheet

| $V_{RRM}$<br>max. repetitive<br>peak voltage<br>(V) | $V_{R(RMS)}$<br>max. RMS<br>reverse voltage<br>(V) | $V_R$<br>max. DC<br>blocking voltage<br>(V) | recommended<br>RMS working<br>voltage<br>(V) | Type                  |                    |
|-----------------------------------------------------|----------------------------------------------------|---------------------------------------------|----------------------------------------------|-----------------------|--------------------|
|                                                     |                                                    |                                             |                                              | without terminal lead | with terminal lead |
| 100                                                 | 70                                                 | 100                                         | 40                                           | PSM/PSMR 60/01L       | PSM/PSMR 60/01K    |
| 200                                                 | 140                                                | 200                                         | 80                                           | PSM/PSMR 60/02L       | PSM/PSMR 60/02K    |
| 400                                                 | 280                                                | 400                                         | 160                                          | PSM/PSMR 60/04L       | PSM/PSMR 60/04K    |
| 600                                                 | 420                                                | 600                                         | 240                                          | PSM/PSMR 60/06L       | PSM/PSMR 60/06K    |
| 800                                                 | 560                                                | 800                                         | 320                                          | PSM/PSMR 60/08L       | PSM/PSMR 60/08K    |
| 1000                                                | 700                                                | 1000                                        | 400                                          | PSM/PSMR 60/10L       | PSM/PSMR 60/10K    |
| 1200                                                | 840                                                | 1200                                        | 480                                          | PSM/PSMR 60/12L       | PSM/PSMR 60/12K    |
| 1400                                                | 980                                                | 1400                                        | 560                                          | PSM/PSMR 60/14L       | PSM/PSMR 60/14K    |
| 1600                                                | 1120                                               | 1600                                        | 640                                          | PSM/PSMR 60/16L       | PSM/PSMR 60/16K    |

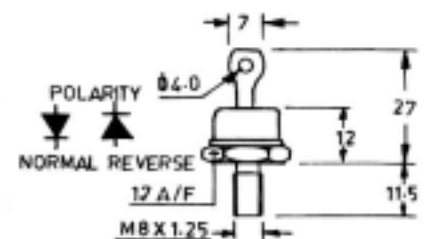
| Symbol      | Conditions                                                                   | Maximum Ratings |                  |
|-------------|------------------------------------------------------------------------------|-----------------|------------------|
| $I_{F(AV)}$ | $T_C = 125^\circ\text{C}$                                                    | 60              | A                |
| $I_{FSM}$   | $T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$                              | 860             | A                |
| $I_{FRM}$   | max. peak cycle repetitive surge current                                     | 300             | A                |
| $I^2t$      | max. $I^2t$ rating (non-rep.) for 5 to 10 ms                                 | 5000            | A <sup>2</sup> s |
| $I_{R(AV)}$ | max. average reverse leakage current at $V_{RRM}$ ; $T_C = 25^\circ\text{C}$ | 200             | $\mu\text{A}$    |
| $V_{FM}$    | max. peak forward voltage drop @ rated $I_{F(AV)}$                           | 1.3             | V                |
| $R_{thJC}$  | max. thermal resistance junction to case                                     | 0.55            | K/W              |
| $T_{VJ}$    | operating junction temperature                                               | -65... + 150    | $^\circ\text{C}$ |
| $T_{VJM}$   | max. virtual junction temperature                                            | 150             | $^\circ\text{C}$ |
| $T_{stg}$   | storage temperature                                                          | -65... + 200    | $^\circ\text{C}$ |
| $M_d$       | mounting torque                                                              | min. 0.4        | mkg              |
|             | (non-lubricated threads)                                                     | max. 0.6        | mkg              |
| Weight      | PSM/PSMR 60L                                                                 | typ. 13.5       | g                |
| Weight      | PSM/PSMR 60K                                                                 | typ. 30         | g                |

### Features

- All Diffused Series
- Available in Normal & Reverse Polarity
- Industrial Grade
- Available in Avalanche Characteristic

## DO - 5

PSM/PSMR 60L



PSM/PSMR 60K

