

Silicon Power Diode PSM/PSMR 16

$$I_{F(AV)} = 16 \text{ A}$$

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

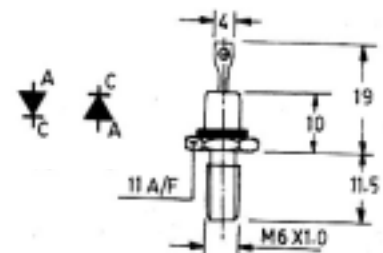
Preliminary Data Sheet

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

| Symbol | Conditions | Maximum Ratings | |
|---------------|--|-----------------|------------------|
| $I_{F(AV)}$ | $T_C = 150^\circ\text{C}$ | 16 | A |
| I_{FSM} | $T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$ | 300 | A |
| I_{FRM} | max. peak cycle repetitive surge current | 80 | A |
| I^2t | max. I^2t rating (non-rep.) for 5 to 10 ms | 450 | A ² s |
| $I_{R(AV)}$ | max. average reverse leakage current at V_{RRM} ; $T_C = 25^\circ\text{C}$ | 100 | μA |
| V_{FM} | max. peak forward voltage drop @ rated $I_{F(AV)}$ | 1.2 | V |
| R_{thJC} | max. thermal resistance junction to case | 1 | 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... + 150 | $^\circ\text{C}$ |
| M_d | mounting torque | min. 0.14 | mkg |
| | (non-lubricated threads) | max. 0.17 | mkg |
| Weight | typ. | 7 | g |

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PSM/PSMR 16



Features

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