# Silicon Power Diode

**PSM/PSMR 250K** $I_{F(AV)}$ = 250 A
**PSMF/PSMFR 250K** $V_{RRM}$ = 100 - 1600 V

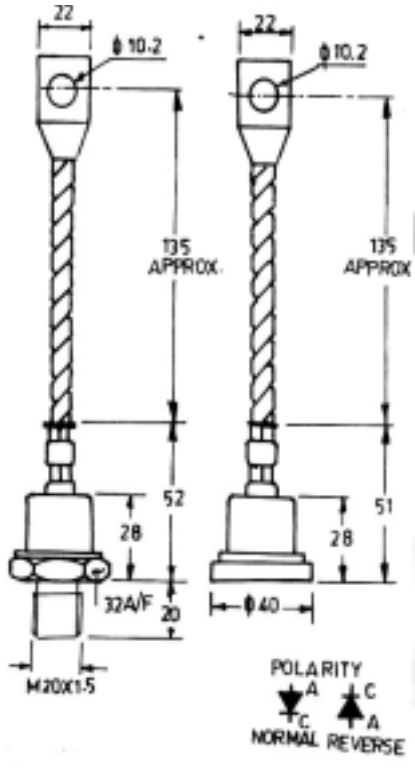
Preliminary Data Sheet

| $V_{RRM}$ 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 with terminal lead | |
|---|---|---|---|---|---|
| 100 | 70 | 100 | 40 | PSM/PSMR 250/01K | PSMF/PSMFR 250/01K |
| 200 | 140 | 200 | 80 | PSM/PSMR 250/02K | PSMF/PSMFR 250/02K |
| 400 | 280 | 400 | 160 | PSM/PSMR 250/04K | PSMF/PSMFR 250/04K |
| 600 | 420 | 600 | 240 | PSM/PSMR 250/06K | PSMF/PSMFR 250/06K |
| 800 | 560 | 800 | 320 | PSM/PSMR 250/08K | PSMF/PSMFR 250/08K |
| 1000 | 700 | 1000 | 400 | PSM/PSMR 250/10K | PSMF/PSMFR 250/10K |
| 1200 | 840 | 1200 | 480 | PSM/PSMR 250/12K | PSMF/PSMFR 250/12K |
| 1400 | 980 | 1400 | 560 | PSM/PSMR 250/14K | PSMF/PSMFR 250/14K |
| 1600 | 1120 | 1600 | 640 | PSM/PSMR 250/16K | PSMF/PSMFR 250/16K |

| Symbol | Conditions | | Maximum Ratings | |
|---|---|---|---|---|
| $I_{F(AV)}$ | $T_C$ = 130°C | | 250 | A |
| $I_{FSM}$ | $T_{VJ}$ = 45°C t = 10 ms | | 4500 | A |
| $I_{FRM}$ | max. peak cycle repetitive surge current | | 1200 | A |
| $I^2t$ | max. $I^2t$ rating (non-rep.) for 5 to 10 ms | | 100000 | $A^2s$ |
| $I_{R(AV)}$ | max. average reverse leakage current at $V_{RRM}$; $T_C$ = 25°C | | 2 | µA |
| $V_{FM}$ | max. peak forward voltage drop @ rated 1F(AV) | | 1.35 | V |
| $R_{thJC}$ | max. thermal resistance junction to case | | 0.18 | K/W |
| $T_{VJ}$ | operating junction temperature | | -65... + 150 | °C |
| $T_{VJM}$ | max. virtual junction temperature | | 150 | °C |
| $T_{stg}$ | storage temperature | | -65... + 200 | °C |
| $M_d$ | mounting torque | min. | 3.2 | mkg |
| | (non-lubricated threads) | max. | 3.7 | mkg |
| Weight | typ. | | 260 | g |

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PSM/PSMR 250 PSMF/PSMFR 250




**Features**

- Diffused Series
- Available in Normal & Reverse Polarity
- Industrial Grade

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