

### Silicon Power Diode

**PSM/PSMR 100K**  
**PSMF/PSMFR 100K**

$I_{F(AV)} = 100 \text{ A}$   
 $V_{RRM} = 100 - 1600 \text{ V}$

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

Symbol	Conditions	Maximum Ratings
$I_{F(AV)}$	$T_C = 150^\circ\text{C}$	100 A
$I_{FSM}$	$T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$	2300 A
$I_{FRM}$	max. peak cycle repetitive surge current	500 A
$I^2t$	max. $I^2t$ rating (non-rep.) for 5 to 10 ms	26000 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 $I_{F(AV)}$	1.4 V
$R_{thJC}$	max. thermal resistance junction to case	0.40 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. 2.0 mkg max. 3.0 mkg (non-lubricated threads)
<b>Weight</b>	typ.	150 g

#### Features

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

