

## Silicon Power Diode

## PSM/PSMR 100K

$I_{F(AV)} = 100 \text{ A}$   
 $V_{RRM} = 100 \text{ V to } 2000 \text{ V}$

### 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
100	70	100	40	PSM/PSMR 100/01K
200	140	200	80	PSM/PSMR 100/02K
400	280	400	160	PSM/PSMR 100/04K
600	420	600	240	PSM/PSMR 100/06K
800	560	800	320	PSM/PSMR 100/08K
1000	700	1000	400	PSM/PSMR 100/10K
1200	840	1200	480	PSM/PSMR 100/12K
1400	980	1400	560	PSM/PSMR 100/14K
1600	1120	1600	640	PSM/PSMR 100/16K
1800	1260	1800	720	PSM/PSMR 100/18K
2000	1400	2000	800	PSM/PSMR 100/20K

Symbol	Conditions	Maximum Ratings	
$I_{F(AV)}$	$T_C = 150^\circ\text{C}$	100	A
$I_{FSM}$	max. peak (one-cycle) non-repetitive surge current $T_{vj} = 45^\circ\text{C}$ $t = 10 \text{ ms}$	2300	A
$I_{FRM}$	max. peak repetitive surge current	500	A
$I^2t$	max. $I^2t$ rating (non rep.) for 5 to 10 ms	26000	$\text{A}^2\text{s}$
$I_{R(AV)}$	$V_R = V_{RRM}, T_C = 25^\circ\text{C}$	0.2	mA
$V_{FM}$	$I_F = 100 \text{ A}$	PSM/PSMR 100/01K to PSM/PSMR 100/16K	1.4 V
		PSM/PSMR 100/18K and PSM/PSMR 100/20K	1.5 V
$R_{th(j-c)}$	max. thermal resistance junction to case	0.40	K/W
$T_{vj}$	operating junction temperature	-65 ... +150	$^\circ\text{C}$
$T_{vj\text{m}}$	max. virtual junction temperature	150	$^\circ\text{C}$
$T_{stg}$	storage temperature	-65 ... +200	$^\circ\text{C}$
$M_d$	Mounting torque (non-lubricated threads)	min.	2.0 mkg
		max.	3.0 mkg
Weight	typ.	150	g

### Features

- All Diffused Series
- Industrial grade
- Available in normal and reverse polarity
- Available in avalanche characteristic
- Metric and UNF thread type

### Package Outline

(All dimensions in mm)

PSM/PSMR 100K

