

## Silicon Power Diode

**PSM/PSMR 320K**  
**PSMF/PSMFR 320K**

$I_{F(AV)} = 320 \text{ A}$   
 $V_{RRM} = 100 - 1600 \text{ V}$

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

Symbol	Conditions	Maximum Ratings
$I_{F(AV)}$	$T_C = 125^\circ\text{C}$	320 A
$I_{FSM}$	$T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$	5500 A
$I_{FRM}$	max. peak cycle repetitive surge current	1500 A
$I^2t$	max. $I^2t$ rating (non-rep.) for 5 to 10 ms	180000 A <sup>2</sup> s
$I_{R(AV)}$	max. average reverse leakage current at $V_{RRM}$ ; $T_C = 25^\circ\text{C}$	5 $\mu\text{A}$
$V_{FM}$	max. peak forward voltage drop @ rated $I_{F(AV)}$	1.65 V
$R_{thJC}$	max. thermal resistance junction to case	0.15 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. (non-lubricated threads) max.	3.2 mkg 3.75 mkg
<b>Weight</b>	typ.	350 g

### Features

- Diffused Series
- Mainly Available in Reverse Polarity
- Industrial Grade
- Device conforms to IS 3700 (iii) & IS 440 (iii)
- Outline Conforms to IS 5000 (DO-9)

## DO - 9

PSM/PSMR 320 PSMF/PSMFR 320

