

Silicon Power Diode

PSM/PSMR 300K

PSMF/PSMFR 300K

$$I_{F(AV)} = 300 \text{ A}$$

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

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 300/01K	PSMF/PSMFR 300/01K	
200	140	200	80	PSM/PSMR 300/02K	PSMF/PSMFR 300/02K	
400	280	400	160	PSM/PSMR 300/04K	PSMF/PSMFR 300/04K	
600	420	600	240	PSM/PSMR 300/06K	PSMF/PSMFR 300/06K	
800	560	800	320	PSM/PSMR 300/08K	PSMF/PSMFR 300/08K	
1000	700	1000	400	PSM/PSMR 300/10K	PSMF/PSMFR 300/10K	
1200	840	1200	480	PSM/PSMR 300/12K	PSMF/PSMFR 300/12K	
1400	980	1400	560	PSM/PSMR 300/14K	PSMF/PSMFR 300/14K	
1600	1120	1600	640	PSM/PSMR 300/16K	PSMF/PSMFR 300/16K	

Symbol	Conditions	Maximum Ratings	
$I_{F(AV)}$	$T_C = 125^\circ\text{C}$	300	A
I_{FSM}	$T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$	5000	A
I_{FRM}	max. peak cycle repetitive surge current	1400	A
I^2t	max. I^2t rating (non-rep.) for 5 to 10 ms	150000	A ² s
$I_{R(AV)}$	max. average reverse leakage current at V_{RRM} ; $T_C = 25^\circ\text{C}$	3	μA
V_{FM}	max. peak forward voltage drop @ rated $I_{F(AV)}$	1.35	V
R_{thJC}	max. thermal resistance junction to case	0.18	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. 3.2 max. 3.7	mkg
Weight	typ.	260	g

Features

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

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PSM/PSMR 300 PSMF/PSMFR 300

