

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

with terminal lead	
PSMF/PSMFR 320/01K	PSMF/PSMFR 320/02K
PSMF/PSMFR 320/04K	PSMF/PSMFR 320/06K
PSMF/PSMFR 320/08K	PSMF/PSMFR 320/10K
PSMF/PSMFR 320/12K	PSMF/PSMFR 320/14K
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 ² s
$I_{R(AV)}$	max. average reverse leakage current at V_{RRM} ; $T_C = 25^\circ\text{C}$	5 μA
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. 3.2 mkg max. 3.75 mkg
Weight	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

