

Silicon Power Diode

PSM/PSMR 70L
PSM/PSMR 70K

$I_{F(AV)} = 70 \text{ A}$
 $V_{RRM} = 100 - 1600 \text{ V}$

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	without terminal lead
200	140	200	80	without terminal lead
400	280	400	160	without terminal lead
600	420	600	240	without terminal lead
800	560	800	320	without terminal lead
1000	700	1000	400	without terminal lead
1200	840	1200	480	without terminal lead
1400	980	1400	560	without terminal lead
1600	1120	1600	640	without terminal lead
				with terminal lead
				PSM/PSMR 70/01K
				PSM/PSMR 70/02K
				PSM/PSMR 70/04K
				PSM/PSMR 70/06K
				PSM/PSMR 70/08K
				PSM/PSMR 70/10K
				PSM/PSMR 70/12K
				PSM/PSMR 70/14K
				PSM/PSMR 70/16K

Symbol	Conditions	Maximum Ratings
$I_{F(AV)}$	$T_C = 125^\circ\text{C}$	70 A
I_{FSM}	$T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$	1000 A
I_{FRM}	max. peak cycle repetitive surge current	350 A
I^2t	max. I^2t rating (non-rep.) for 5 to 10 ms	7500 A ² s
$I_{R(AV)}$	max. average reverse leakage current at V_{RRM} ; $T_C = 25^\circ\text{C}$	200 μA
V_{FM}	max. peak forward voltage drop @ rated $I_{F(AV)}$	1.3 V
R_{thJC}	max. thermal resistance junction to case	0.55 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. 0.4 mkg
	(non-lubricated threads)	max. 0.6 mkg
Weight	PSM/PSMR 70L	typ. 13.5 g
Weight	PSM/PSMR 70K	typ. 30 g

Features

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

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