

### Silicon Power Diode PSM/PSMR 12

$$I_{F(AV)} = 12 \text{ A}$$

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

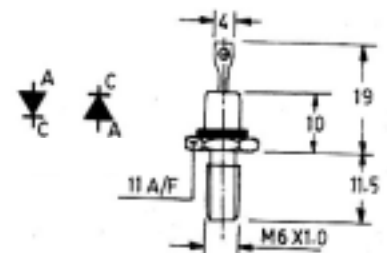
Preliminary Data Sheet

$V_{RRM}$ 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 12/01L
200	140	200	80	PSM/PSMR 12/02L
400	280	400	160	PSM/PSMR 12/04L
600	420	600	240	PSM/PSMR 12/06L
800	560	800	320	PSM/PSMR 12/08L
1000	700	1000	400	PSM/PSMR 12/10L
1200	840	1200	480	PSM/PSMR 12/12L
1400	980	1400	560	PSM/PSMR 12/14L
1600	1120	1600	640	PSM/PSMR 12/16L

Symbol	Conditions	Maximum Ratings	
$I_{F(AV)}$	$T_C = 150^\circ\text{C}$	12	A
$I_{FSM}$	$T_{VJ} = 45^\circ\text{C}$ $t = 10 \text{ ms}$	250	A
$I_{FRM}$	max. peak cycle repetitive surge current	60	A
$I^2t$	max. $I^2t$ rating (non-rep.) for 5 to 10 ms	250	A <sup>2</sup> s
$I_{R(AV)}$	max. average reverse leakage current at $V_{RRM}$ ; $T_C = 25^\circ\text{C}$	100	$\mu\text{A}$
$V_{FM}$	max. peak forward voltage drop @ rated $I_{F(AV)}$	1.3	V
$R_{thJC}$	max. thermal resistance junction to case	2	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... + 150	$^\circ\text{C}$
$M_d$	mounting torque	min. 0.14	mkg
	(non-lubricated threads)	max. 0.17	mkg
<b>Weight</b>	typ.	7	g

### DO - 4

PSM/PSMR 12



#### Features

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