

## Silicon Power Diode

PSM/PSMR 300K

PSMF/PSMFR 300K

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

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

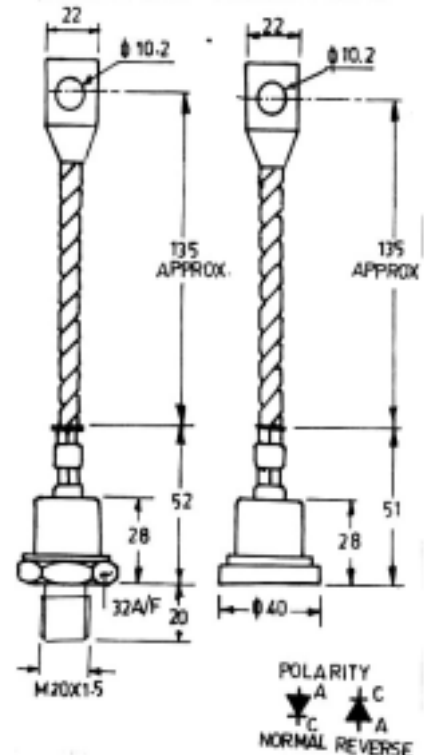
Preliminary Data Sheet

$V_{RRM}$ 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 <sup>2</sup> s
$I_{R(AV)}$	max. average reverse leakage current at $V_{RRM}$ ; $T_C = 25^\circ\text{C}$	3 $\mu\text{A}$
$V_{FM}$	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 mkg max. 3.7 mkg
Weight	typ.	260 g

## DO - 9

PSM/PSMR 300    PSMF/PSMFR 300



### Features

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