POWERSEM

DO - 8

Silicon Power Diode

PSM/PSMR 100K $I_{F(AV)}$ = 100 A
PSMF/PSMFR 100K V_{RRM} = 100 - 1600 V

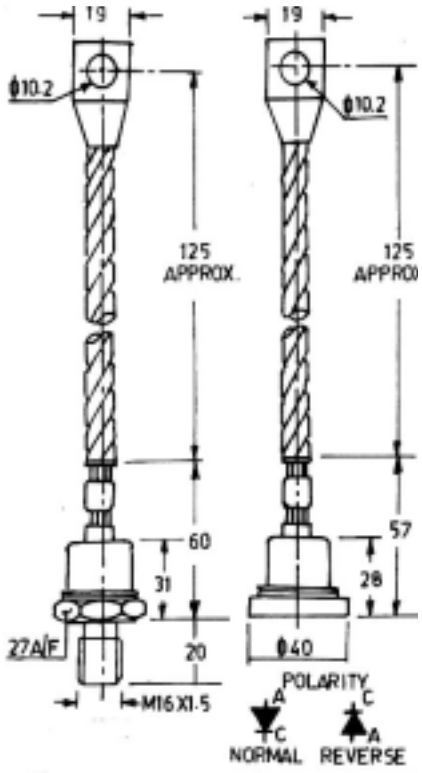
Preliminary Data Sheet

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 100/01K	PSMF/PSMFR 100/01K
200	140	200	80	PSM/PSMR 100/02K	PSMF/PSMFR 100/02K
400	280	400	160	PSM/PSMR 100/04K	PSMF/PSMFR 100/04K
600	420	600	240	PSM/PSMR 100/06K	PSMF/PSMFR 100/06K
800	560	800	320	PSM/PSMR 100/08K	PSMF/PSMFR 100/08K
1000	700	1000	400	PSM/PSMR 100/10K	PSMF/PSMFR 100/10K
1200	840	1200	480	PSM/PSMR 100/12K	PSMF/PSMFR 100/12K
1400	980	1400	560	PSM/PSMR 100/14K	PSMF/PSMFR 100/14K
1600	1120	1600	640	PSM/PSMR 100/16K	PSMF/PSMFR 100/16K

Symbol	Conditions		Maximum Ratings	
$I_{F(AV)}$	T_C = 150°C		100	A
I_{FSM}	T_{VJ} = 45°C t = 10 ms		2300	A
I_{FRM}	max. peak cycle repetitive surge current		500	A
I^2t	max. I^2t rating (non-rep.) for 5 to 10 ms		26000	A^2s
$I_{R(AV)}$	max. average reverse leakage current at V_{RRM}; T_C = 25°C		200	µA
V_{FM}	max. peak forward voltage drop @ rated 1F(AV)		1.4	V
R_{thJC}	max. thermal resistance junction to case		0.40	K/W
T_{VJ}	operating junction temperature		-65... + 150	°C
T_{VJM}	max. virtual junction temperature		150	°C
T_{stg}	storage temperature		-65... + 200	°C
M_d	mounting torque	min.	2.0	mkg
	(non-lubricated threads)	max.	3.0	mkg
Weight	typ.		150	g

DO - 8

PSM/PSMR 100 PSMF/PSMFR 100



Features

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

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