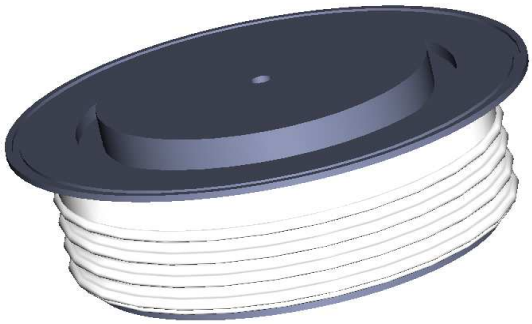
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GPDP4247

AVALANCHE RECTIFIER DIODE

VOLTAGE UP TO	**3200**	**V**
AVERAGE CURRENT	**2475**	**A**
SURGE CURRENT	**26**	**kA**

BLOCKING CHARACTERISTICS

Characteristic		Conditions	Value	
V_{RRM}	Repetitive peak reverse voltage		3200	V
I_{RRM}	Repetitive peak reverse current, max.	V_{RRM}, single phase, half wave, Tjmax	75	mA
P_{RSM}	Peak reverse power, max	Tjmax, tp = 20µs	75	kW

FORWARD CHARACTERISTICS

$I_{F(AV)}$	Average forward current	Sine wave,180° conduction, T h = 55℃	2475	A
$I_{F(RMS)}$	R.M.S. forward current	Sine wave,180° conduction, Th = 55℃	3886	A
I_{FSM}	Surge forward current	Non rep. half sine wave, 50 Hz, V_R = 0 V, $T_j = T_{jmax}$	26	kA
I^2t	I^2 t for fusing coordination		3380	kA^2s
$V_{F(TO)}$	Threshold voltage	$T_j = T_{jmax}$	0,89	V
r_F	Forward slope resistance	$T_j = T_{jmax}$	0,170	mΩ
V_{FM}	Peak forward voltage, max	Forward current I_F = 4000 A, Tj = 25 ℃	1,50	V

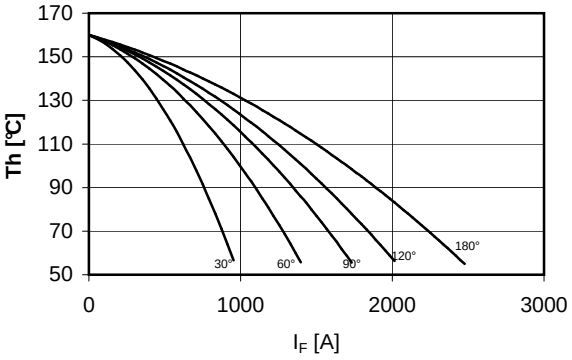
SWITCHING CHARACTERISTICS

Q_{rr}	Rverse recovery charge, typ	$T_j = T_{jmax}$, I_F = 2000 A, di/dt = -5 A/µs	2500	µC
I_{rr}	Reverse recovery current	V_R = 100 V		A
t_{rr}	Reverse recovery time			µs

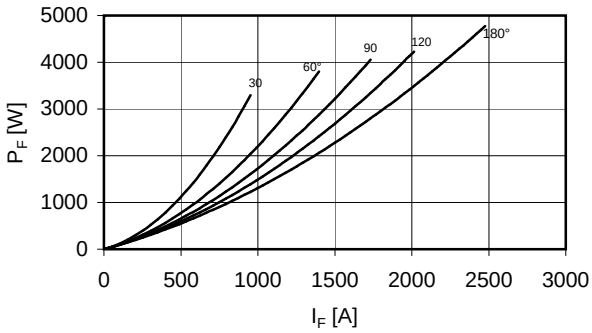
THERMAL AND MECHANICAL CHARACTERISTICS

$R_{th(j-c)}$	Thermal resistance (junction to case)	Double side cooled	0,020	℃/W
$R_{th(c-h)}$	Thermal resistance (case to heatsink)	Double side cooled	0,002	℃/W
T_{jmax}	Max operating junction temperature		160	℃
T_{stg}	Storage temperature		-40 / 160	℃
F	Clamping force ± 10%		22	kN
	Mass		500	g

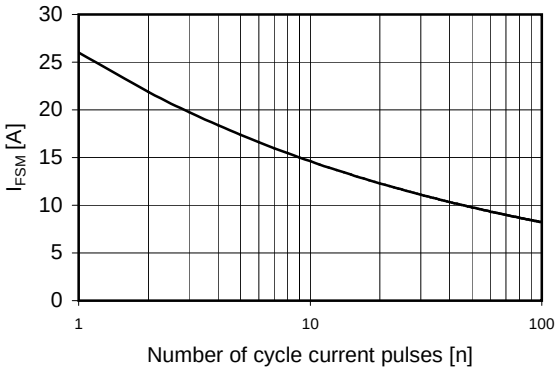
Current rating - sine wave



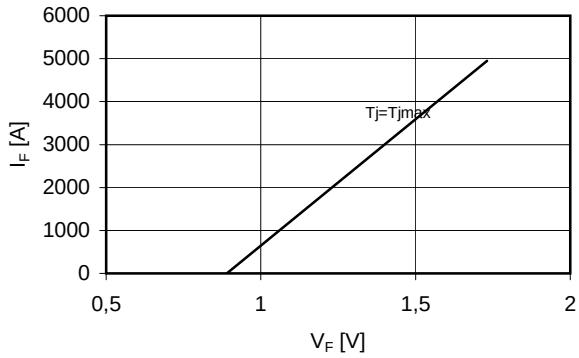
Power loss - sine wave



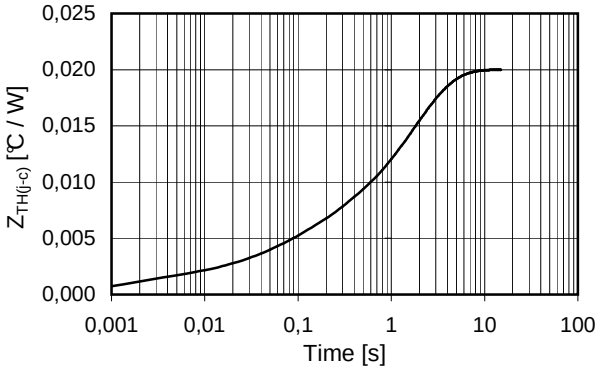
Maximum surge current
d.s. cooled

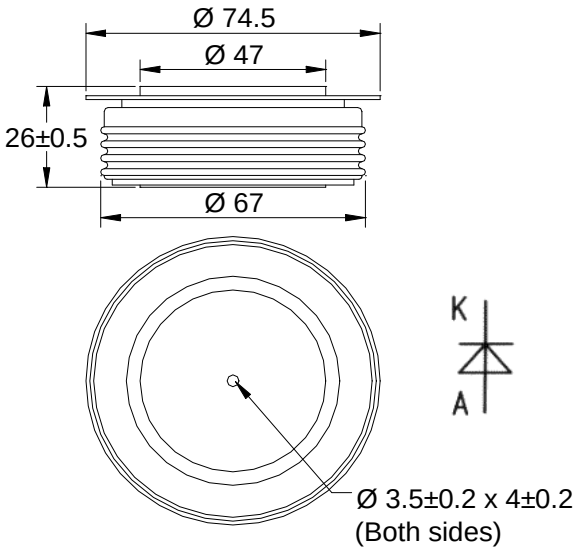


Forward voltage drop



Thermal Impedance (j-c)





In the interest of product improvement Green Power Solutions reserves the right to change any specification given in this data sheet without notice.