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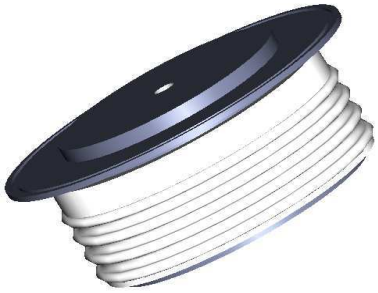
GPDN3143



RECTIFIER DIODE

BLOCKING VOLTAGE UP TO	**2800**	**V**
AVERAGE CURRENT	**1430**	**A**
SURGE CURRENT	**15**	**kA**

BLOCKING CHARACTERISTICS

Characteristic		Conditions	Value
V_{RRM}	Repetitive peak reverse voltage		2800 V
V_{RSM}	Non-repetitive peak reverse voltage		2900 V
I_{RRM}	Repetitive peak reverse current, max.	V_{RRM}, single phase, half wave, Tjmax	50 mA

FORWARD CHARACTERISTICS

$I_{F(AV)}$	Average forward current	Sine wave,180°conduction, T h = 55℃	1430 A
$I_{F(RMS)}$	R.M.S. forward current	Sine wave,180°conduction, Th = 55℃	2246 A
I_{FSM}	Surge forward current	Non rep. half sine wave, 50 Hz, V_R = 0 V, $T_j = T_{jmax}$	15 kA
I^2t	I^2t for fusing coordination		1125 kA^2s
$V_{F(TO)}$	Threshold voltage	$T_j = T_{jmax}$	0,933 V
r_F	Forward slope resistance	$T_j = T_{jmax}$	0,242 mΩ
V_{FM}	Peak forward voltage, max	Forward current I_F = 1200 A, Tj = Tjmax	1,22 V

SWITCHING CHARACTERISTICS

Q_{rr}	Rverse recovery charge, typ	$T_j = T_{jmax}$, I_F = A, di/dt = A/µs	µC
I_{rr}	Reverse recovery current		A

THERMAL AND MECHANICAL CHARACTERISTICS

$R_{th(j-c)}$	Thermal resistance (junction to case)	Double side cooled	0,034 ℃/W
$R_{th(c-h)}$	Thermal resistance (case to heatsink)	Double side cooled	0,007 ℃/W
T_{jmax}	Max operating junction temperature		160 ℃
T_{stg}	Storage temperature		-40 / 160 ℃
F	Clamping force ± 10%		11 kN
	Mass		300 g

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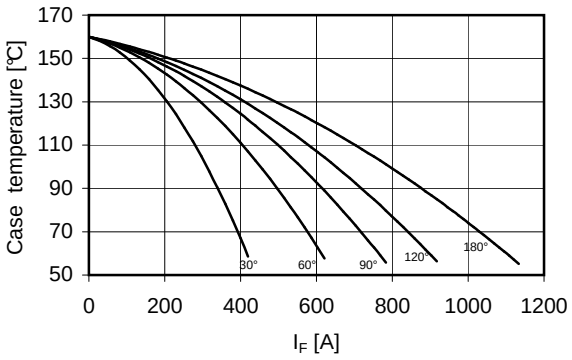
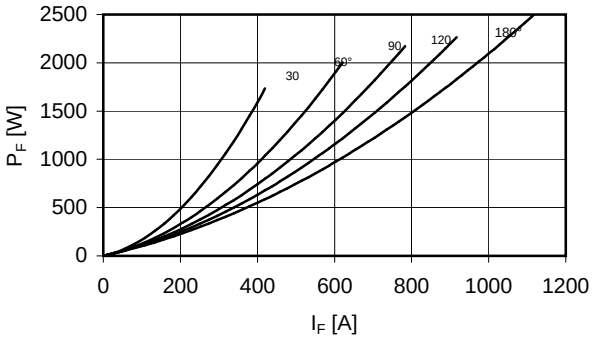
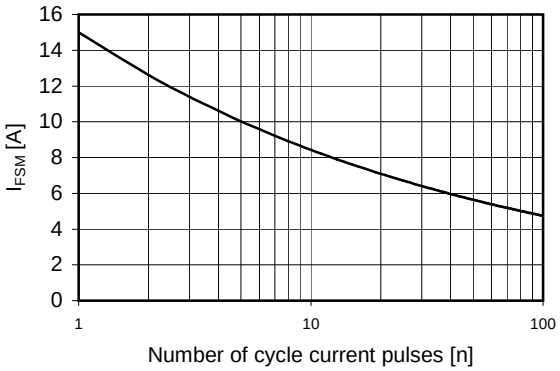
Current rating - sine wave



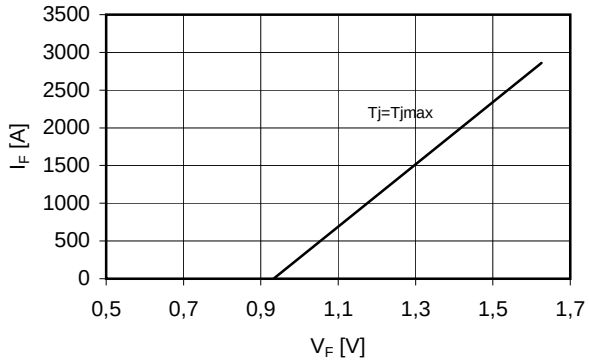
Power loss - sine wave



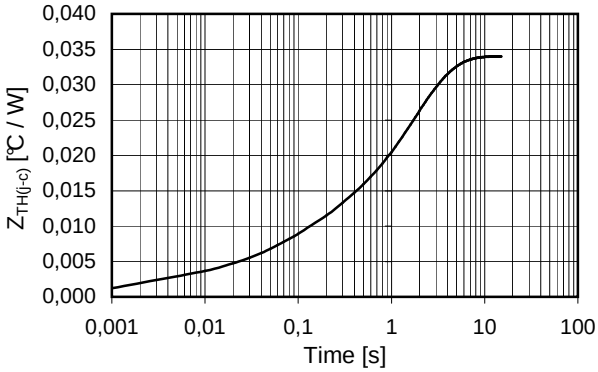
Maximum surge current
d.s. cooled

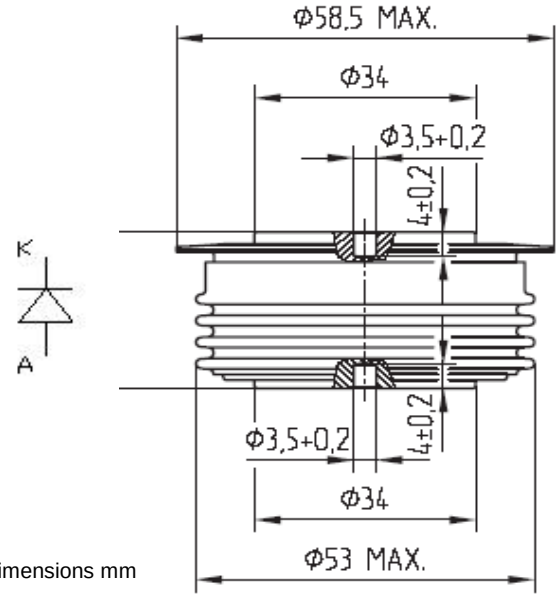


Forward voltage drop



Thermal Impedance (j-c)





dimensions mm

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

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