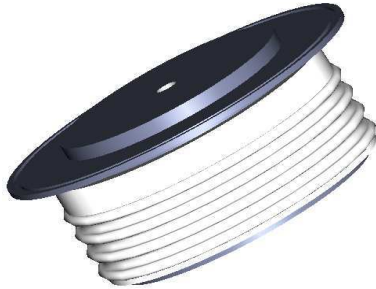


GPDN1230

RECTIFIER DIODE



VOLTAGE UP TO	1000 V
AVERAGE CURRENT	2300 A
SURGE CURRENT	28 kA

BLOCKING CHARACTERISTICS

Characteristic		Conditions	Value
VRRM	Repetitive peak reverse voltage		1000 V
VRSM	Non-repetitive peak reverse voltage		1100 V
IRRM	Repetitive peak reverse current, max.	VRRM, single phase, half wave, Tjmax	50 mA

FORWARD CHARACTERISTICS

IF(AV)	Average forward current	Sine wave, 180° conduction, Th = 55°C	2300 A
IF(RMS)	R.M.S. forward current	Sine wave, 180° conduction, Th = 55°C	3613 A
IFSM	Surge forward current	Non rep. half sine wave, 50 Hz, VR = 0 V, Tj = Tjmax	28 kA
I²t	I² t for fusing coordination		3920 kA²s
VF(TO)	Threshold voltage	Tj = Tjmax	0.72 V
rF	Forward slope resistance	Tj = Tjmax	0.123 mΩ
VFM	Peak forward voltage, max	Forward current IF = 4000 A, Tj = Tjmax	1.21 V

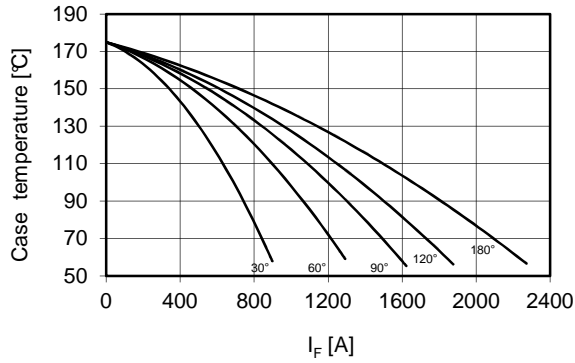
SWITCHING CHARACTERISTICS

Qrr	Reverse recovery charge, typ	Tj = Tjmax, IF = 1000 A, di/dt = -5 A/μs	μC
Irr	Reverse recovery current		A

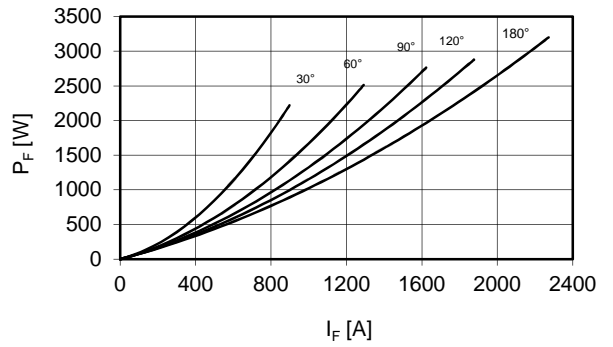
THERMAL AND MECHANICAL CHARACTERISTICS

Rth(j-h)	Thermal resistance (junction to heatsink)	Double side cooled	0.037 °C/W
Tjmax	Max operating junction temperature		175 °C
Tstg	Storage temperature		-40 / 175 °C
F	Clamping force ± 10%		12 kN
	Mass		300 g

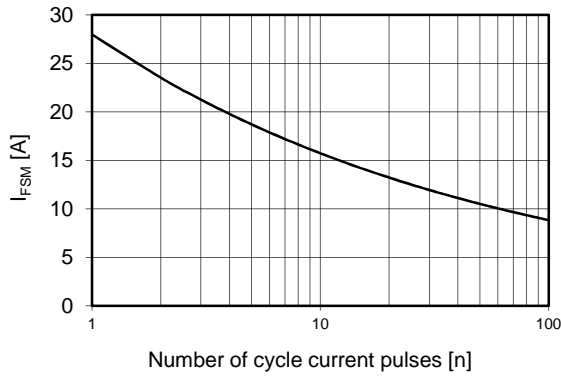
Current rating - sine wave



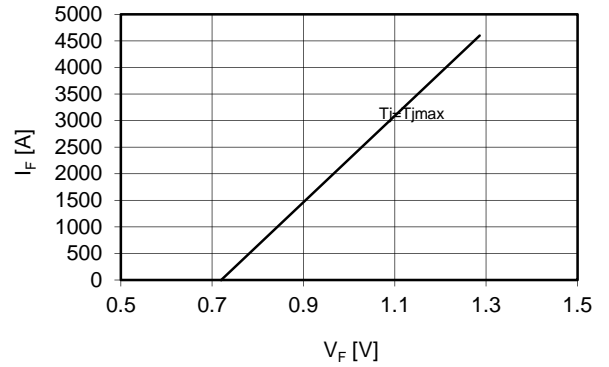
Power loss - sine wave



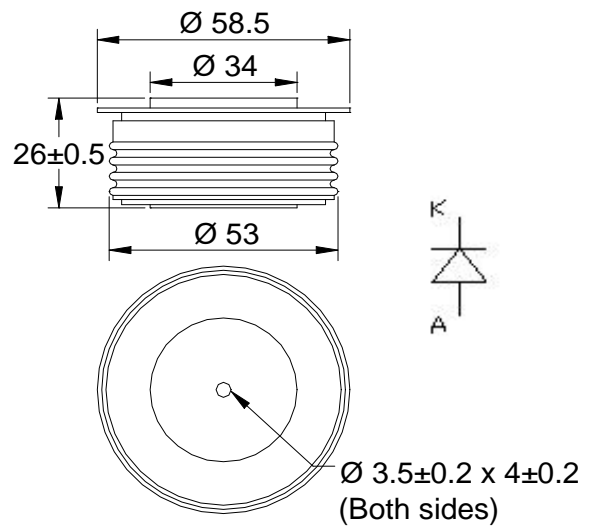
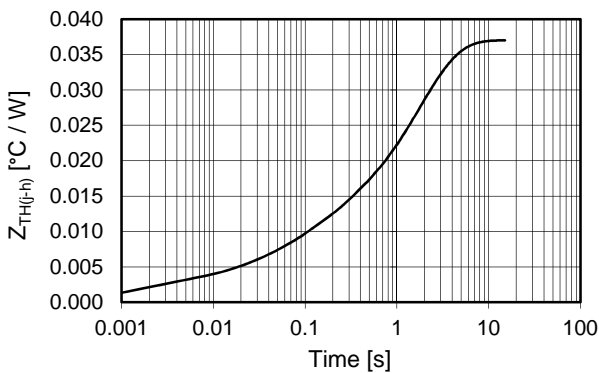
Maximum surge current d.s. cooled



Forward voltage drop



Thermal Impedance (j-h)



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.