

# GPDR2750

RECTIFIER DIODE



**VOLTAGE UP TO** 2000 V  
**AVERAGE CURRENT** 7500 A  
**SURGE CURRENT** 65 kA

## BLOCKING CHARACTERISTICS

Characteristic	Conditions	Value
VRRM	Repetitive peak reverse voltage	2000 V
VRSM	Non-repetitive peak reverse voltage	2100 V
IRRM	Repetitive peak reverse current, max. VRRM, single phase, half wave, Tj = Tjmax	120 mA

## FORWARD CHARACTERISTICS

IF(AV)	Average forward current	Sine wave, 180° conduction, Th = 55°C	7500 A
IF(RMS)	R.M.S. forward current	Sine wave, 180° conduction, Th = 55°C	11781 A
IFSM	Surge forward current	Non rep. half sine wave, 50 Hz, VR = 0 V, Tj = Tjmax	65 kA
I²t	I² t for fusing coordination		21125 kA²s
VF(TO)	Threshold voltage	Tj = Tjmax	0.861 V
rF	Forward slope resistance	Tj = Tjmax	0.046 mΩ
VFM	Peak forward voltage, max	Forward current IF = 4000 A, Tj = Tjmax	1.05 V

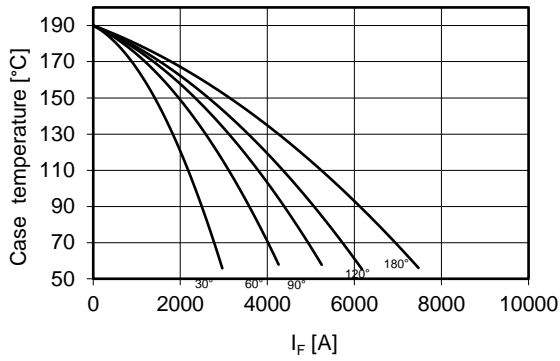
## SWITCHING CHARACTERISTICS

Qrr	Reverse recovery charge, typ	Tj = Tjmax, IF = 2000 A, di/dt = -5 A/μs	μC
Irr	Reverse recovery current	VR = 100 V	A
trr	Reverse recovery time		μs
VFP	Forward recovery voltage	Tj = Tjmax, di/dt = A/μs	V

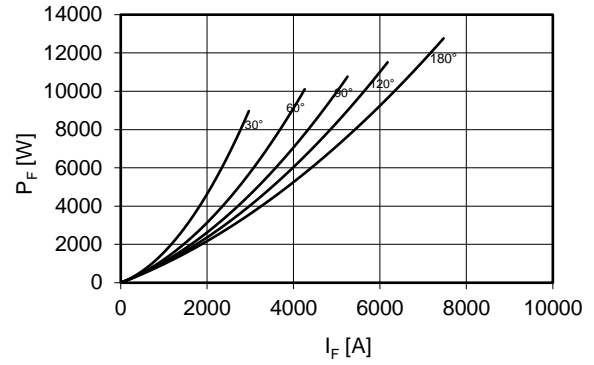
## THERMAL AND MECHANICAL CHARACTERISTICS

Rth(j-c)	Thermal resistance (junction to case)	Double side cooled	0.008 °C/W
Rth(c-h)	Thermal resistance (case to heatsink)	Double side cooled	0.003 °C/W
Tjmax	Max operating junction temperature		190 °C
Tstg	Storage temperature		-40 / 190 °C
F	Clamping force ± 10%		40 kN
	Mass		950 g

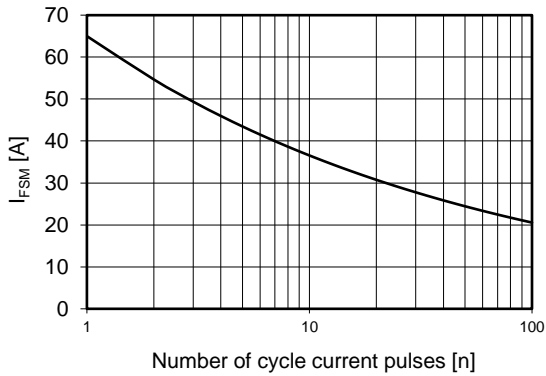
Current rating - sine wave



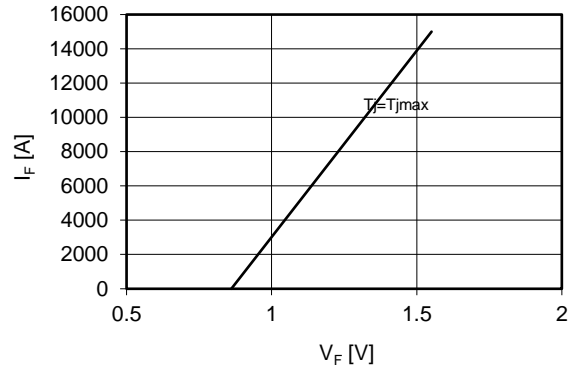
Power loss - sine wave



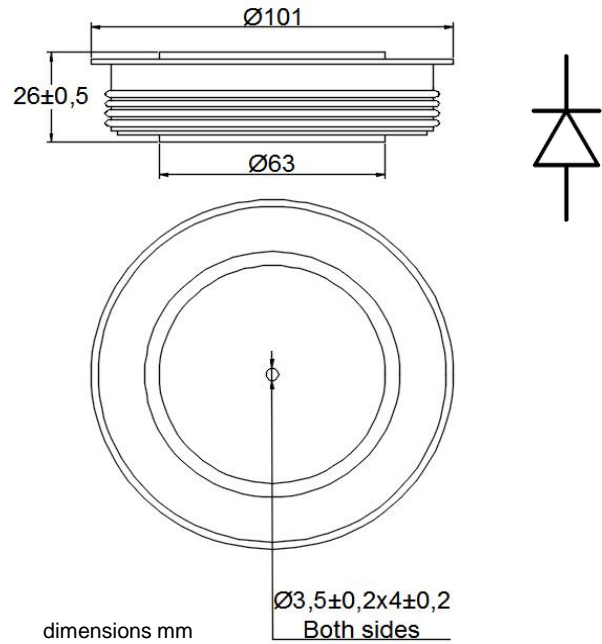
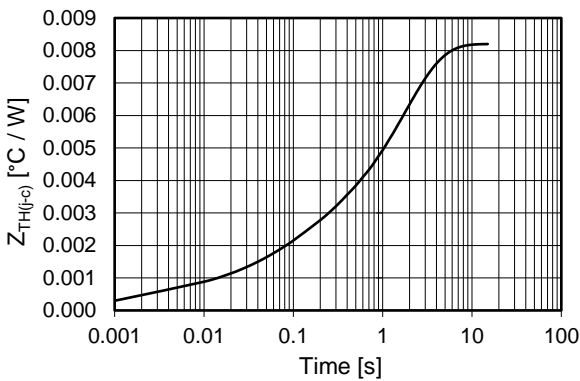
Maximum surge current d.s. cooled



Forward voltage drop



Thermal Impedance (j-c)



Ordering information GPDR2750-VV

VV: blocking voltage / 100 (e.g. 20 for 2000V)

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